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# CONTRIBUTIONS

TOWARDS THE

# MATERIA MEDICA & NATURAL HISTORY

# OF CHINA.

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Medical Missionary in Central China.

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# DEDICATION.

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# PREFACE.

This work has been the employment of the leisure of some two years, spent in the examination of native works on the Chinese Materia Medica and Natural History, and in the collection of the best native drugs. As originally sketched out, the work was entitled "Contributions towards an Anglo-Chinese Materia Medica, for the use of Medical Missionaries and Native Students." It was primarily suggested by the want of a further expansion of a small "Medical Vocabulary," published at Shanghai in 1858, by Dr. Hobson of the London Missionary Society. It professes to give the sense of the old medical writers, who were the naturalists of their time, upon the nature and use of some of the objects which affect the health of the sick and the comparatively sound. So far as the degenerate race, which has succeeded the long line of imperial, princely and magisterial observers in medical matters, has departed from the traditions of the ancient *Shin-nung*, *Hwang-ti*, *Chi-peh*, *Lú-pien*, *Li-tang-chí*, *Hwa-to*, *Wang-shuh* and *Li-shi-chin*, this heresy has been generally proclaimed. To Osbeck, Reeves, Abel, Loureiro, Williams, Bridgman, Bunge, Hoffman, Schultes, Tatarinov, Hanbury, Hance, Mayers, Swinhoe, Sampson, Williamson and many other well-known contributors to the knowledge of China, the author is very largely indebted. After the greater part of the work had been written out, Dr. Williams of Peking very kindly copied out a list of some five hundred drugs, compiled by Dr. Alexander Tatarinov, late Physician to the Russian Mission in China. Although only the bare Chinese names of some, and merely the Russian and Latin equivalents of the Chinese characters of others, were given, the work was of considerable service. More especially as the scientific names had been revised by Professor Horaninow of St. Petersburgh.

Another valuable source of assistance on many points was the small pamphlet of "Notes on Chinese Materia Medica," by Daniel Hanbury, F.R.S. It is a matter of regret that this work has never been actually published for sale. It serves as a model of investigation on such points, and has the advantage of numerous illustrations. The Hongkong "Notes and Queries," and the Transactions of the North-China Branch of the Royal Asiatic Society, have been very largely drawn upon. The "Description of articles of Import and Export," contained in Dr. Williams' Fifth Edition of the "Chinese Commercial Guide" has been of great use. To the contributions of Dr. Bretschneider to the "Chinese Recorder" and other periodicals, many obligations are due. The Customs' Reports have furnished valuable information, and to Mr. Hobson of Hankow many thanks are rendered for specimens of drugs kindly forwarded. One work must not be passed over, for very many of its terms, descriptions and formulæ have been turned to account. The "Pharmacopœia of India," prepared by Dr. E J. Waring, for the India Office, is a most valuable work for every practitioner in China. Many of the drugs in use in India are known in, or are exported to, China, and *vice versâ*, Besides the 爾雅 (*Rh-ya*), a kind of encyclopedia of natural and general objects and matters, dating from a very early period, and the 廣羣芳譜 (*Kwang-k'iun-fang-p'u*), the new edition of a Botanical Thesaurus of the *Ming* time, re-published in the year 1708, the largest amount of Chinese original matter has been taken from the 本草綱目 (*Pen-ts'au-kang-muh*), a work compiled by 李時珍 (*Li Shi-chin*), a district-magistrate, born at 蘄州 (*K'i-chau*), a town on the right bank of the Yangtsze River, in the east of the province of Hupeh. This work of some forty years was a "Synopsis of Ancient Herbals," a name which is justified by the fact that 1096 out of the whole number of officinal species of drugs are referred to the vegetable kingdom. He took the thirty-nine previous publications on the Materia Medica, containing the observations of some eight hundred authors, beginning with the mythical emperor 神農 (*Shin-nung*). and re-arranged the 1518 various drugs recommended by these writers, adding 874 new remedies of his own suggestion. There are 251 of these substances, the nature and uses of which are not thoroughly understood, a remark which would seem to be applicable to very many more of them. There are 11,896 formulæ given in this work of fifty-two chapters, which was presented by the son of the author to the *Ming* emperor *Wan-lih*, on his father's death, and published about 1597. These substances are arranged in 62 great classes, under the 16 orders Water, Fire, Earths, Minerals and Metals, Herbs, Grain and Pulse, Vegetables, Fruits, Trees, Garments and Utensils, Insects, Scaly animals, Mailed and Shelly creatures, Birds, Beasts and Man. Some of these divisions contain non-conformable genera, but this early attempt at classification merits some of the praise accorded to it by Rémusat. Five of the first great classes are formed of the five elements, or factors, which enter into the composition of all things, according to Chinese philosophy. Under each of some 1641 substances the synonymes are collated and corrected, and the names explained as to their origin, sound and sense. Sanscrit, Tungusic and other synonymes are often given in the form of Chinese transliterations of great interest, as representing the dialects and languages of ancient peoples. The source, form and general history of each drug are then given, and its collection, or manufacture, for use as a drug is followed by directions as to its preservation and treatment for the purposes of the druggist. The nature and properties are then briefly given, and the therapeutical uses, as indicated generally by various authoritative writers, sketched out. Solutions of doubts, and discussions of the antipathies of the medicine, are succeeded by a host of formulæ. Traces of the old alchemy, and an attempt or two at the chemical testing of drugs, occur in some of the articles. Curious trials for the purity of substances attest the ancient prevalence of that habit of sophistication, which is the original sin of the Chinese. Four principal editions or reprints of this work have appeared since the original edition, now very scarce. The first *Manchu* emperor *Shun-chi* was a great patron of the work, and the last regular reprint was brought out in the year 1826, the sixth of the reign of Taukwang, the grandfather of the present emperor *Tung-chi.* The edition referred to in the following pages may be generally understood to be that of the 46th year of the emperor *K'ien-lung.* Accompanying the work is a large number of rude drawings of crystals, minerals, diagrams of mines, and sketches of plants and animals. Many of this cannot be identified at all, but they have been numbered by Hanbury, who gives a capital list of the various contents of the book. It is usually bound in some 38 or more volumes, which may be generally purchased at Ningpo, and probably at Canton. Many plants, having the characters 胡 (*Hu*), 夷 (*I*) or 海 (*Hai*), are said to be of foreign origin. This must be understood to mean foreign to some part of the original territory of the old "Middle Kingdom" of China. Fruits especially have been introduced into one part of the present empire of China from another region, *now* but *not then* included in the home country, and therefore strictly foreign. Plants were brought from Central Asia by such persons as the legate *Chang K'ien,* (Han dynasty), the Lucullus or Raleigh of China, which were and still are positively indigenous to a portion of the China Proper of the present time. We cannot then but admire the frankness with which many plants are acknowledged to be in some sense imports. Many curious, nonsensical and disgusting things are recommended in the *Pen Ts'au,* but the good sense of *Li Shi-chin* has purged its pages to a great extent, or corrected some of its most ridiculous blunders. Some thirty-seven substances are given under the article on Man as fit to administer as medicines to the sick. The exclusion of all such substances from this work must not be understood to convey the idea that they are not in use at the present time by the Chinese, an unclean people.

Some names have been experimentally introduced as convenient terms for drugs and appliances which have been long in use in Mission Hospitals in China. The terms used by Dr. Hobson and others have been adhered to as far as possible, and no decided attempt to introduce a new or complete nomenclature has been ventured upon. Sulphates are apparently described, as a rule, by the Chinese authors as 礬 (*Fan,*), with specific distinctions based upon colour or source. This word *Fan* seems to be the equivalent of the old chemical term "vitriol," applied to the sulphates of Copper, Iron and Zinc. It expresses too the notion, to the Chinese, of a regular crystalline salt. The word *Siau* (消), originally meaning a flux for minerals, is taken to stand for nitrates in general, following the nitrate of potash, or nitre, the 消 石 (*Siau-shih*), of the *Pen Ts'au. Tan* (丹) is set apart for oxides, although in the case of cinnabar, a sulphide, this name is already diverted from this leading sense. Sulpurets are denoted by the character 黃 (*Hwang*), or 磺 (*Hwang*), the characters standing for yellow sulphur. 霜 (*Shwang*), stands for a sublimate, or for an acetate. 砂 (*Sha*), has been adopted to express the appearance and condition of a more or less perfectly crystallized salt, as this character is connected with, and yet differentiated from, the character for stone (石 *Shih*), which is defined in Chinese dictionaries as something hard and white. All this is in perfect accordance with native terminology, as a rule, and there the matter is left. There is a stong tendency on the part of pharmacologists to discard the ever-changing terms of the theorising chemists, and to revert to the old terms of the classical period of nomenclature.

Chinese doctors as a rule employ few mineral or metallic substances in the treatment of internal disease. To teach them the rational uses of the mercurial and ferruginous prepartions which remain to them as the fruits of the alchemical school of 葛洪 (*Koh-hung*), 劉玄眞 (*Liu-hiuen-chin*), and others of the *Tsin* and later periods of Chinese science, should be one of the first aims of those who propose to reform the practice of the native medical profession of China, a sorry set of descendants of *Li Shi-chin.*

It is hoped that for the purposes of travellers, military camps or gunboats in the interior, and Mission Hospitals, as well as Coolie-depôts of Chinese resident in foreign countries, this work will have some practical value, in suggesting the best available remedies, or substitutes for foreign drugs dictated by necessity or economy. Examiners of drugs in countries visited or colonised by the Chinese, will find some little help in deciding upon the nature of drugs passing through customs' stations.

To the curious who may wish to be reminded of the state of pharmacy in Europe not much more than a hundred years ago, this brief survey of the Chinese Pharmacopœia will not be without interest. Many drugs still lingering in the cold shade of popular physic, and still decorated with the empty, trivial name of *officinalis*, are in full favour with the Chinese. The interesting researches of Dr. Dudgeon, given in the "*Chinese Recorder*," present another aspect of the Chinese faculty, or rather that branch of it known as the 道家 (*Tau-kia*), in books. It would be unfair to say that the "doctors of reputation" (名醫) countenance many of these tricks, although the "ordinary practitioners" (庸醫) do in many instances.

Much valuable assistance has been received during the progress of this work from Dr. R. A. Jamieson, of Shanghai, to whom many obligations on this and former occasions are due.

Many thanks are due to the Manager of the American Presbyterian Misson Press, Shanghai, for care paid to the bringing out of the work.

F. P. S.

HANKOW, *November* 30*th*, 1870.

# A

**ABRUS PRECATORIUS.**—相思子 (*Siang-sz'-tsze*), 紅豆 (*Hung-tau*).—This leguminous shrub grows to the height of several feet in the south of China. Its Chinese name, "anxious desire," refers to the sorrows of some widow who wept under one of these trees, and died of her grief. The small berries, ovoid, of the size of large shot, hard, bright coral-red, with a black spot around the hilum, are used as beads by Chinese children. They are said to be slightly deleterious, and to have the power of preventing camphor from evaporation when kept with it. Emetic, alexipharmic, diaphoretic, cooling, expectorant, antiperiodic, and anthelmintic properties are referred to them The root, which has been used as a substitute for liquorice as a demulcent and pectoral in India and Java, is unused by the Chinese. WARING directs an extract to be prepared in the same way as the Extractum Glycyrrhizæ of the Pharmacopœia. The wood has an excellent grain. TATARINOV has fallen into the popular error of confounding this berry with a genuine species of bean, perfectly distinct, and separately described under the sixth division of Grains and Pulse as 赤小豆 (*Chʻih siau tau*), or "small red bean." One of the Abrus berries is said by Dr WILLIAMS to be the unit of weight employed by the Burmese. "Crabs' eyes" is, apparently, an American name of this same comparatively worthless drug, as used in the form of the seeds by the Chinese.

**ACACIA CONCINNA.**—肥皂莢 (*Fei-tsau-kiah*).—This is the Mimosa saponaria of Roxburgh, and is met with as a large leguminous tree in Hupeh, bearing white flowers. Its pods are collected for the market, and are met with as greasy, fleshy, yellowish, or reddish-brown legumes, three or four inches long, and about one-and-a-half broad. They abound in an acrid, detergent, fatty principle, so that when the pods are roasted and pounded, they may be kneaded into balls. These are as large as children's marbles, and are used to wash clothes and the person They are called 肥皂宅 (*Fei-tsau-toh*), and are not allowed to be used in the public baths, as they have a strong smell. The pods are emetic, and are directed to be given in rheumatism, diarrhœa, and hœmaturia; and to be applied to porrigo, scabies, lepra, eczema, bubo, and abscesses. The Chinese name for soap 肥皂 (*Fei tsau*), is derived from this plant.

**ACACIA CONCINNA.**—肥皂核 (*Fei-tsau-heh*).—These are the smooth, black seeds of the Acacia Concinna, described by HANBURY, under the name of 肥皂荳 (*Fei-tsau-tau*), as those of a Dialium? They are about one-half to three-quarters of an inch in diameter, of a compressed spherical shape, with a persistent podosperm, and from three to five in a pod. They are edible after roasting, but are more frequently used by the makers of artificial flowers to wax their threads with. They are officinal in leprosy. The water of the pods is said to kill gold-fish.

**ACACIA NEMU.**—合歡 (*Hoh-hwan*), 夜合 (*Yé-hoh*).—This is the Mimosa arborea of Loureiro, and is sensitive, the leaves folding together at night, as the Chinese name implies. It is also said to promote agreement and affection. Honan and Sech'uen are named as places chiefly affected by this tree, said to resemble the Acacia concinna. It is used for purposes of ornament, and the leaves are said to be eatable as well as detergent. The bark is reputed to be tonic, vulnerary, sedative, anthelmintic, and discutient. A gummy extract is prepared and used as a plaster for carbuncles, swellings, and as a retentive in fracture or sprain. This drug is scarcely known in Hankow.

**ACID ACETIC.**—濃醋 (*Nung-ts'ü*).—Unknown. The name is altered from Dr. Hobson. Although the Chinese have, for ages, been acquainted with the processes of distilling and rectifying spirit of wine, they do not appear to have attempted to concentrate their strong, but nauseous, vinegar. Very pure acetic acid might be obtained by fermenting the juice of the Sorgho.

**ACID, CITIRC.**—㨴檬砂 (*Ning-mung-sha*).—Unknown to the Chinese. This name is coined to express the crystallized acid.

**ACID, MURIATIC.**—鹽强水, (*Yen-k'iang-shui*).—Unknown. This Name is adopted from Dr. Hobson.

**ACID, NITRIC.**—焇硝强水, (*Yen-siau-k'iang-shui*).—Unknown. This Name is adopted from Dr. Hobson, in part.

**ACID, PRUSSIC.**—杏仁汁, (*Hang-jin-chih*.—The acid itself is unknown, but the substance here mentioned, which resembles the *aqua amygdalarum* or *emulsio hydrocyanata* of the Swedish Pharmacopœia, contains it, as it is the "juice of almond-pips" and is used in the treatment of coughs. A two-pipped stone has been said to have killed a dog.

**ACID, SULPHURIC.** (Oil of Vitrol)—硫磺油 (*Liu-hwang-yú*.—Unknown. This Name is adopted from the *Pen Ts'au*, under the article "Rock-oil." It is the equivalent of the popular name Oil of Vitriol.

**ACONITUM SINENSE.**—烏頭 (*Wú t'u*).—Several species of Aconite are met with in China. Maximomicz met with nine species in the Amur region, four near Peking, and three in Mongolia. The Chinese name here given refers to the resemblance of the flower to the beak or head of the crow. Several drugs prepared for the drug-market, require to be separately described, although they are, in some cases, evidently obtained from the same species.

**ACONITUM SINENSE.**—川烏頭 (*Ch'uen-wú-t'u*), 光烏 (*Kwang wu*).—These are top-shaped, conical, tuberous roots, tapering down to a point, from one inch and a-quarter to one inch and a-half in length, and rather more than half-an-inch in thickness, according to the size and number of the dried rootlets which project irregularly from the surface. The external cuticle is irregularly rough and hard, and of a brownish black colour, whilst the interior mealy structure is firm and of a dirty-white colour. The taste is bitter, acrid, and benumbing. These tubers are seldom worm-eaten. The second Chinese name is merely a synonyme of this drug, which is highly poisonous and scarcely used.

**ACONITUM VARIEGATUM.**—附子 (*Fú-tsze*), 黑附子 (*Heh-fu-tsze*).—A kind of Aconite is cultivated on a large scale in Chang-ming hien, Lung-ngan fu, Sech'uen. An elaborate work on this cultivation was written in the Sung dynasty, from which it appears that by the use of pig's dung, and a long period of domestication, the species of Aconite, and perhaps Aconitum napellus, have been rendered much less poisonous. The plant is made to develope very many appended side-tubers, which, when gathered in the winter, are prepared by steeping in vinegar and salting them in a way only known to those engaged in this extensive and lucrative trade. Those with numerous radicles are the most esteemed. The plant is said to be identical with the *Ch'uen-wu-tʻu*, just named. As found in the drug-shops, they are rather larger than the roots to be directly described, but otherwise, precisely similar in appearance. The second Chinese name distinguishes this drug from *peh-fu-tsze*, an Aroid plant.

**ACONITUM VARIEGATUM.**—天雄 Tʻ*ien-hiung*).—From the description in the *Pen Tsʻau*, this would almost appear to be a staminiferous, sterile variety of the Aconitum variegatum cultivated in Sech'uen, Hupeh and Nganhwui, and altered by cultivation. The prepared tubers are top-shaped, ovoid, measuring one inch and three-quarters long by one inch and a-half in breadth, of a black colour externally, and often encrusted with a saline efflorescence. Several tubercles emboss the outer surface, more especially at the upper part. The interior is of a blackish-brown colour, moist and greasy. In some fresher specimens the colour was lighter, and the texture more amylaceous. The taste is saltish, followed by the characteristic sensations caused by aconite.

**ACONITUM VARIEGATUM.**--附片 (*Fú-pʻien*).—This drug is merely the tubers of the Aconitum variegatum, stripped of the cuticle after soaking in vinegar, dried throughly, and cut into thin slices, which are brittle, curled, translucent, white, and exhibit the concentric arrangement of the vascular bundles which traverse the root lengthwise. It is but very slightly acrid, as might be expected from the action of the acid of the vinegar on the root, which is macerated in it for a week. Another drug said to be derived from the small side-tubers of the Aconitum variegatum, is called 側子 (*Tseh-tsze*). It has not been met with in Hankow.

**ACONITUM.**—草烏頭 (*Tsʻau-wú-tʻu*).—These are the mixed tuberous roots of more than one very highly poisonous species of Aconite, brought from Kiangnan and Chekiang, and formerly used to poison arrows for military and hunting purposes. The addition of the character *tsau* to the generic term *wu-tʻu* is partly explained by the fact that the plant, which may be the Aconitum ferox, grows wild, or from portions of the stem or rootstock being generally attached to the roots. The specimens vary a good deal, being sometimes ovoid, oblong, and tapering to a point, or bifid, or even rounded at the extremities. They vary from three-quarters of an inch, to one inch and a-half in length, are covered with a smoothish or wrinkled, dark cuticle, and are very frequently worm-eaten. Internally they are whitish and starchy, have very little, if any, odour, but the taste is very acrid and benumbing. Liautung is said to yield the plant, from which a very powerful sun-dried extract is said to be prepared. The deadly properties of this preparation have been confirmed by the experiments of Dr. CHRISTISON. A country west of China is said to prepare an arrow-poison from a species of Aconite called 獨白草 (*Tuh-peh-tʻsau*). All the drugs above mentioned as obtained from certain species of aconite are only used in medical practice after they have been prepared in various ways, so as to diminish the poisonous or medicinal properties of the plants. *C‘huen-wu-t‘u*, is not used as a medicine here, although it is mentioned in the *Pen Ts‘au*, but, according to HANBURY, the powdered root is employed as a means of producing local anæsthesia, when mixed with *T‘sau-wu-t‘u*, and the flowers of the Azalea or Hyoscyamus. Stimulant, diaphoretic, arthritic, sedative, expectorant, deobstruent, alterative and diuretic properties are attributed to *Fú-t‘sze*, *T‘ien-hiung*, and *Fú-p‘ien*. They are, accordingly, used in fevers, ague, apoplexy, rheumatism, leprosy, neuralgia, headache, dysuria, dropsy, cholera, and dysmenorrhœa. Some of the uses are identical with those of the Aconitum heterophyllum of the Indian Pharmacopœia. *See Wolfsbane.*

**ACORNS.**—橡實 (*Siang-shih*), 橡斗 (*Siang-tau*), 櫟捄 (*Lih-k‘iu*).—The fruits of several species of oak are used as food for man and beast. A kind of bean-curd is sometimes made from the ground meal, and a black dye is obtained from it when mixed with a salt of iron. The second name applies to the cup of the acorn. Astringent and nutrient properties are attributed to all parts of the fruit, and a wash or ointment is made from the fresh or the parched acorns as an application to cancer, to prolapsed rectum, or aching teeth. *See Oak.*

**ACORUS CALAMUS.**—水菖蒲 (*Shui-c‘hang-p‘u*).—This widely-spread water-plant (*Orontiaceæ*), is met with in China, and, contrary to the directions of the *Pen Ts‘au*, is used in medicine, as well as the other species of Sweet Flag.

**ACORUS GRAMINEUS.**—石菖蒲 (*Shih-c‘hang-p‘u*).—This species of Acorus, with Acorus terrestris 菖蒲 (*C‘hang-p‘u*), supplies the drug sold under the latter name in Hankow. The plant is artificially cultivated to supply the great demand for its sword-like leaves, which are hung up at the dragon-boat festival, on the fifth day of the fifth month of each year. The drug is brought from *Yu-chau fu* (Sech’uen), *Fung-t’siang fu* (Shensi), and *Ngan-Shun fu* (Kwei-Chau), and is met with in the form of brittle, brownish-yellow, broken rootlets, ridged irregularly, and, not inaptly, compared by the Chinese to whip-cord. They have an agreeable smell, and the interior is white, starchy in texture, and of a sweetish, aromatic flavour. It is probable that the rhizome proper is also employed, as it is a much more efficient drug. Stimulant, tonic, antispasmodic, sedative, stomachic, diaphoretic, antiperiodic, astringent, anthelmintic, arthritic, and other properties are referred to this drug, which has some very excellent properties, as confirmed by many trustworthy observers in India and Europe. Its insecticidal or insectifugal properties are understood by the Chinese, who refer its prophylactic powers to some such influence. It is worth while remembering that in Constantinople this drug is largely eaten as a preventive against pestilence. The powder, the juice, and a tincture, are favourite modes of exhibition with the Chinese, who use it in hœmoptysis, colic, menorrhagia, and other fluxes, and apply the juice, or the coarse powder, to carbuncles, buboes, deaf ears, and sore eyes. It is said to be antidotal to the poison of euphorbiaceous plants. The leaves are used to wash pustular sores and the sores of lepers. The flowering of the plant is said to betoken large harvests.

**ADENOPHORA.**—沙參 (*Sha-san*).—The milky root of this Campanulaceous plant bears some resemblance to ginseng, for which it is sometimes fraudulently substituted. It occurs in tapering pieces, from four to eight inches in length, with a whitish-brown, wrinkled exterior, and is much lighter and bulkier then ginseng. The interior is spongy, and of a yellowish-white, and the cross-section shows a curiously plicated arrangement of the tissue, the folds radiating irregularly from the centre to the circumference. As the stem grows older, this arrangement is less distinct. It is used as a pectoral, tussic, and alterative, and much resembles the Campanula glauca of the Japanese, who class it with, and substitute it for true ginseng. Its full Chinese name should, perhaps, be 沙洲參 (*Sha-chau-san*), or ginseng, from *Sha-chau* (or *Shahien*) in Fuh-kien province. The taste is sweetish, and it would appear to have some demulcent or expectorant properties.

**AERATED WATER.**—嗬囒水 (*Ho-lan-shui*).—This now familiar Chinese name has been coined by themselves. Sodawater is manufactured from filtered water, by the aid of machinery and chemicals, in all the large treaty-ports by Cantonese, who produce a very fair article. It is occasionally employed by the natives as a cooling medicine, *See Lemonade.*

**ÆSCULUS CHINENSIS.**—天師栗 (*T'ien-sz-lih*), 娑羅子 (*So-lo-tsz'*).—The fruit of this soap-wort, met with in Hupeh and Sech'uen, is but little different from the common horse-chestnut. The hilum is large, and the integument of a dark, reddish-brown colour. The bark of the tree contains a crystalline, fluorescent principle, and some species of this genus are poisonous, but these nuts are sweet, and are merely credited with being useful in cases of contracted limbs from palsy or rheumatism. This is the 所羅子 (*So-lo-tsz*), of TATARINOV, in all probability. The first name is derived from that of 張天師 (*Chang-t'ien-sz'*), the pope of the Tauist priests living in *Kiang-si*. These fruits selling at threepence each in Hankow, induces the Chinese to put some faith in them, for they invariably place rarity at the head of their list of the conditions of the value of any remedy.

**ÆTHIOPS MINERAL.**—靈砂 (*Ling-sha*).—*See Sulphuret of Mercury and Sulphur.*

**AGAR-AGAR.**—海菜 (*Hai-ts'ai*), 海藻 (*Hai-tsau.*)—The first Chinese name, "sea-vegetable," stands for all the various kinds of Algæ, used more frequently at the present time as dietetic articles than as medicinal agents. The word "Agar-agar" is the Malay name for Gigartina tenax and Sphærococcus, marine algæ growing on the rocky shores of Malaysia. The former differs but little from Corsican moss, formerly used as a vermifuge, and consisting of several mixed species and genera. *See Laminaria and Seaweed.*

**AGAVE CHINENSIS.**—土沉香 (*T'u-ch'in-hiang.*)—This Amaryllidaceous plant is not mentioned in the *Pen Ts'au*, but is apparently met with in Formosa, from which island many valuable additions to the Flora Medica of China may be expected to be made. The Agave Americana (呂宋麻 *Lu-sung ma*) is said by Mr. T. SAMPSON to have been introduced into Canton province from *Lu-Sung*, or Manilla; at least the fibres, sometimes called Pita-flax, are said to be employed in the manufacture of mosquito netting. This fibre has, however, been referred, by French botanists to Chamærops excelsa, and the hemp has been called *po-lo-ma*. It is more probable that the latter is the Chinese name for Triumfetta, a Tiliaceous plant, which see. The Agave Mexicana has been confounded by Professor NEUMANN with the 扶桑 (*Fu-sang*), a Malvaceous tree, and upon this identification he has grounded a presumption in favour of an early discovery of America by the Chinese. Indian experience has confirmed the anti-syphilitic properties assigned by the Mexicans to this plant, now largely naturalised in India. The fleshy leaves might serve as poultices when cut into thin slices, as tried by Dr. R. F. Hutchinson in India.

**AGLAIA ODORATA.**—三葉蘭 (*San-yeh-lan*).—The flowers of this Meliaceous plant are used to scent teas. There is also a five-leaved variety. Its leaves and root are worth trial as tonics, as Canella and other excellent tonics are referred to this order. The tender leaves are eaten as a vegetable.

**AILANTHUS FŒTIDA.**—臭樗 (*Ch'au Chü*), 臭椿 (*Ch'au-ch'un*)—The *Pen Ts'au* includes the Cedrela odorata and the Ailanthus fœtida, or glandulosa, under the common heading of 椿樗 (*Chun-chu*). There is some resemblance between these two genera, belonging to two different orders—Ailanthus to Simarubaceæ, and Cedrela to Cedrelaceæ, of the Rutal alliance. Several species of both genera yield timber of various qualities; but the red, fine-grained, mahogany-like wood of Cedrela is far superior to the coarse, white, open timber of Ailanthus, much used as fuel. Species of Dryandra, Fraxinus, and other trees are, evidently, included under this common term of *Ch'un-chü*, which the authors of the *Pen Ts'au* endeavour to distinguish by their agreeable or disagreeable odour. At the time of flowering the Ailanthus gives out a disagreeable smell of garlic, and so does at least one species of Cedrela (Cedrela augustifolia), during the growth of its young shoots. This distinction therefore fails, and the confusion is accounted for. This species of Ailanthus grows all over China, and is met with on the walls of Peking. The leaves are used to feed silkworms, and, in times of scarcity, are used as a vegetable, though much less agreeable than the young leaves of the Cedrela. They are said to be slightly deleterious, and are used as astringent, anthelmintic and deobstruent remedies. They are given in diseases of the lungs, dysuria, tabes infantum, menstrual diseases, spermatorrhœa, and fluxes in general, and a wash is made to promote the growth of the hair, and to wash scabious eruptions and ulcers. In most of these cases the bark, both of the tree and of the root, is used, having precisely the same properties. The bark of the mangrove tree 栲皮, is sometimes adulterated with this inferior substitute. The name 樗皮 (*Chu-p'i*) should be confined to the bark of the Ailanthus, whilst 椿皮, *Ch'un-p'i* is more correctly applied to that of the Cedrela odorata.

**ALEURITES TRILOBA.**—石栗 (*Shih-lih*).—This tree, whose acorn-like fruits, or "stone chestnuts," as the Chinese name signifies, is a native of Annam, or Cochin China, and was known to Loureiro as a species of walnut, just as it is called in India *Belgaum*, or Indian Walnut. It is incidentally mentioned in the *Pen Ts'au*, under the head of "Chestnut," as common in the south of China. A fixed oil is expressed from the kernels, which is exported from Canton in some quantity. This tree abounds in the Moluccas, where the fruit is eaten as an aphrodisiac, and is met with in the island of Tahiti, a gummy substance which exudes from the bark being chewed by the natives. It is mentioned in the *Kwang-K'iun-fang-p'u*, but is not spoken of as having medicinal properties. The oil has been found by the Madras Drug Committee to be superior to linseed oil for commercial purposes, and its action, medicinally, approaches, according to Dr. O'Rorke, very nearly to that of castor-oil, as a mild, certain, and painless purgative. (*See Oil of Stone chestnuts*). This name (*Shih-lih*) is incorrectly given to the fruit of Quercus cornea.

**ALGÆ.**—海藻 (*Hai-tsau*), 頭髮菜 (*T'u-fah-t'sai*).—This name is given to seaweeds from their general resemblance to certain water-plants, (水藻).—*See Laminaria and Agar-agar, as well as Sea-weed.*

**ALISMA PLANTAGO.**—澤瀉, (*Tseh-sié*), 水瀉, *Shwui-sié*).—The globular, ovoid, perennial, fleshy, rhizomes of this water plant (Alismaceæ), sometimes named after the Great Yü, are all brought from *Tsi-nan fu* (Shantung), *Si-ngan fu* (Shensi), and from Honan. A better sort (川瀉), comes from Sech‘uen, a province which pours forth an enormous variety of drugs, so that almost every kind of medicine met with in Chinese drug-warehouses has its *Ch‘uen* (Sech‘uen) variety—generally the best sample. The drug is generally met with in the form of thin, circular sections of the rhizome, from one inch to one inch and a-half in diameter, of a pale yellow colour, mealy, and slightly bitter in taste, and often worm-eaten. The fresh rhizome is somewhat acrid. Tonic, cooling, diuretic, arthritic, stomachic, astringent, galactogogue and discutient properties are attributed to this plant. In fact, any disease of the nature of a flux or dropsy, or disease of the hydrology of the human system, is supposed to be benefitted by this *water*-plant. It is said to confer the power of walking upon water, and to stimulate the female generative apparatus. The leaves are reputed to be serviceable in leprosy, and are used, with the rhizome, to excite uterine action, and the secretion of milk. The fruit is also officinal.

**ALLIUM ASCALONICUM.**—薤 (*Hiái*).—This is the shallot of European gardens, the leaves being round, and the small compressed bulbs clustered together. It is raised in the autumn by seeds planted out, by separating the bulbs in spring, and gathered as a vegetable, though not so highly prized as the Allium uliginosum. The small bulbs, called 薤薤 (*Hiai-t‘u*), are pickled, as in Europe. Tonic, nutrient, astringent, and alterative properties are attributed to the plant, and the bruised bulb is applied as a discutient or vulnerary remedy.

**ALLIUM CEPA.**—葱 (*Tsúng*).—This wholesome, stimulating vegetable is one of the favorite forms of alliaceous food, rich in nitrogeous compounds, by means of which the Chinese eke out their diet of rice. Several varieties, corresponding to those common in the West, are well known in China, where they are cultivated on as large a scale as in Spain or Portugal. A large, coarse, variety is called 木葱 (*muh-tsúng*), or "Tree-onion". Onion-tea is given to persons suffering from catarrh, fever, headache, cholera, diarrhœa, dysentery, urinary disorders, and rheumatic affections. The persons in charge of life-boats on the *Yang-tsze* depend in cases of drowning upon strong onion-tea to excite vomiting and reaction. Onions are applied to the noses of persons who have attempted to hang themselves. Buboes, abscesses, and fractures are poulticed with the stem and bulb (葱白), or anointed with the juice. Every part is reckoned to have some special therapeutic property The Chinese onion is smaller then the foreign onion, being seldom allowed to attain to maturity. The wild onion 茖葱 (*Keh-tsung*), and the foreign onion (胡葱 *Hu-tsúng*), are specially mentioned in the *Pen Ts‘au.* These are allowed to seed, and are propagated in this way for sale to foreigners, though much inferior to European sorts.

**ALLIUM SATIVUM.**—蒜, (*Swan*).—This indigenous variety of garlic is small, but strong, and very largely cultivated as a garden-vegetable. The large variety called 大蒜 (*Ta-swan*), with its compound bulbs, covered with a loose, white skin, is met with in the neighbourhood of large towns, having been brought into use in China by *Chang-K‘ien*, of the Han dynasty. The Arabic name (*Soin*) resembles the Chinese word *Swan*, or *San*, and suggests the source of this plant. A variety of the onion is called 回 回 葱 (*Hwui-hwui-ts‘ung*). The Mongolian dynasty introduced many condiments into the cookery of the Chinese, as the Mongols were great gourmands. The garlic is the first member of five kinds of strong condiments (五 葷), forming a sort of food akin to meat or aminal food, forbidden to the sick and to the regular priesthood. Meat, which properly belongs to this class, is generally called 大 葷 (*Ta-hwun*,) animal fat, such as lard, suet, &c., being distinginshed as 油 葷, (*Yú-hwun*). Chinese patients invariably request directions as to the eating of these various kinds of food. Assafœtida, a favourite addition to roast meat with the Mongol rulers in China, is sometimes included with these condiments, which are gathered mainly from the Alliaceæ, or Cruciferæ, according to the varying rules of the Buddhist or Tauist fraternities. *Chang-k‘ien* figures in the *Pen Ts‘au* as the introducer, during the Han dynasty, of the 大 蒜, (*Ta-swan*), or large foreign variety of garlic, sometimes called 葫 (*Hu*). Stimulant, cordial, antispasmodic, stomachic, prophylactic, vulnerary, and discutient properties are referred to the various parts of the plant. It is supposed to correct the unwholesomeness of water, and to prevent goitre and pestilential diseases.

**ALLIUM ULIGINOSUM.**—韭 (*Kau*).—This speices of Allium is much smaller than the leek, which it somewhat resembles. The leaves are ligulate, and the bulb flat and continuous with the stem. The vegetable is brought in large quantities to market, and is evidently pulled at a very early period of its growth, having been sown in large, close patches. It is supposed to nourish and purify the blood, to act as a cordial, and to be efficacious in all fluxes and hœmorrhages. The seeds are used in similar diseases, more especially in spermatorrhœa, a common disorder amongst the Chinese.

**ALMOND, BITTER.**—杏 (*Hang*), 藥 杏 (*Yoh-hang*), 苦 梅 (*K‘u-mei*).—The fruit of Amygdalus communis, var. amara, is not carefully distinguished by the Chinese from that of the apricot or peach. In this they are borne out by the occurrence in Persia of a kind of peach-tree, intermediate between the almond and the peach. In Europe there are also very constant varieties of peach-almonds. The characters 杏 (*Hang*), 梅 (*mei*), and 李 (*Li*), are carelessly applied by Chinese authors to the genera Amygdalus and Prunus, and sometimes combined. The properties and uses of the bitter almond, known to be poisonous, are not distinguished by Chinese druggists, the kernels (核) 仁) entering into the composition of all the preparations made from the pips of the other species, or varieties, of Amygdalus.

**ALMOND, SWEET.**—杏 (*Hang*), 甜 梅 (*T‘ien-mei*). The sweet variety of the genus Amygdalus is similarly confounded with the apricot, and peach-kernels are found promiscuously supplied under the common term 杏 仁 (*Hang-jin*). The almond is a native of northern climes, although there is an exception in the Amygdalus Cochinchinensis, growing in a warm latitude. The second Chinese name is appropriated for the purpose of distinguishing the "sweet" variety from "*K‘u-mei*" (the "bitter" kind), although the Chinese may here refer to the genus Prunus, as well as to the Amygdalus. The best kernels come from *Shin chau* (Pehchihli), and from *Hoh chau* and *Kiái chau* (Shansi). It is said that if almond-pips keep free from maggots, the next year's season will be a good one. Almonds are said to be heating, sedative, antispasmodic, demulcent, pectoral, tussic, anthelmintic, vulnerary, and tending to longevity. A kind of fatty confection is made from the kernels, and a bland oil is said to be expressed, in the north, from the mixed kernels of Prunus and other Amygdaloid fruits. The flowers, leaves, and branches are officinal, and the root is said to be antidotal to the poison of the fruit. This latter is a favourite principle and practice of Chinese doctors, who look upon the root as the polar antagonist of the stem, the ascending axis, with everything borne upon it. There is, probably, some foundation for this theory.

**ALMOND-TEA.**—杏仁湯 (*Hang-jin-t'ang*).—This decoction is made by crushing the blanched kernels and boiling in water, with the addition of other drugs and flavouring ingredients. This is sold in the streets of some Chinese towns, much as sassafras tea is in European cities, as a kind of ptisan. It is given in coughs, asthma, and catarrhal affections. The juice of almonds is added to rice-congee, and given in hæmorrhages, the kernels being sometimes parched beforehand. Diseases of the eye are, sometimes, treated with applications of almond paste or emulsion. *See Acid, Prussic, and Confection of Almonds.*

**ALOE CHINENSIS.**—蘆會 (*Lú-wei*), 象膽 (*Siang-tan*).—This Liliaceous plant is met with in Canton province, according to the *Pen Ts'au.* Persia, Java, and Sumatra are said to yield this intensely bitter substance, which is sometimes described as the exudation of a tree, and then again referred to a plant. The first Chinese name is probably the transliteration of some foreign name, as *Lah-wei* is also given as a synonym, with other characters. The second name *Siang-tan* (elephant's gall), expresses the bitter flavour of the drug, which is generally supposed to be of foreign origin. The substance sold under this name is met with in irregular pieces, about one inch in thickness, of a coal-black colour, slightly porous, and marked with brilliant crystals on the broken surface. One surface is generally marked with the impression of a gramineous leaf. The taste is rough and bitterish. Anthelmintic, stomachic, and laxative properties are referred to this drug, which would seem to have been formerly much used in the marasmus, worm-fever, and convulsions of children. It is now used mainly as a wash for lepra, pityriasis, and other skin-diseases, being combined with liquorice. As it is usually combined with the fruit of Quisqualis Chinensis, any anthelmintic properties referred to this inert drug may be very readily disposed of.

**ALOES.**—沉香 (*Ch'in-hiang*). *See Lign-Aloes.*

**ALPINIA GALANGA.**—高良薑 (*Kau-liang-kiang*).—This Scitamineous plant is named after the prefecture of 高州府 *Kau-chau fu*, in Canton province, formerly called 高良, *Kau-liang.* This department still yields the fruit sometimes called 紅豆蔻 *Hung-tau-k'au*, or "red nutmegs." There is a Lesser Galanga, variously referred to Alpinia Chinensis, and a species of Hedychium. Dr. HANCE has been engaged for some time upon the distinction of the various kinds of Galangal, which are confounded with another Scitamineous plant, the Kœmpferia, known to the Chinese, and sold as Capoor Cutchery. The Greater Galangal, probably the product of Alpinia galanga and Alpinia racemosa, would appear to be included under the one term of "*Kau-liang* ginger." A coarse and a fine variety are the only distinctions made in the *Pen Ts'au.* This plant is sometimes called 蠻薑 (*Man kiang*), or the "ginger of the Man-tsze," the southern and western aborigines of China. Dr. WILLIAMS gives Shansi and Fuhkien as sources of the root of the Galangal, which he describes as "tough and woody, with a thin bark, full of knobby circles on the outside, bitterish, less aromatic and valuable than the smaller sort. Good roots are about two inches long, and hardly half an inch thick, extremely firm, though light, of a reddish-brown outside, and a pale red where cut, full, plump, and of a peppery aromatic taste." As met with in Hankow, the drug is in thin, flat, wrinkled pieces, resembling inferior ginger, but having much less flavour. Stomachic, cordial, sialagogue, tonic, and antiperiodic properties are enumerated as the most important of the effects of this drug, which has some excellent properties in the estimation of ancient and modern practitioners.

**ALPINIA GALANGA FRUITS.**—高良薑子 (*Kau-liang-kiung-tsze*).—These fruits of the Alpinia galanga, or Galanga Cardamoms, as they have been called by HANBURY, are met with as shrivelled, reddish-brown capsules, of an oblong form, or pear-shaped, and somewhat constricted in the middle. Some are obscurely three-sided, and nearly all are crowned with some remains of the dried calyx. The seeds, united into a three-lobed mass, are reddish-brown, triangular, with a most pungent aromatic taste. The flowers are said to be antidotal of the fumes of wine. The seeds have much the same properties as the root, being given in pyrosis, cholera, diarrhœa, toothache, cynanche, ague, and diseases arising from damp or chills. This drug answers all the purposes of cardamoms and ginger combined, and has been used as a stomachic and tonic with excellent effects in the Hankow Medical Mission Hospital.

**ALTHÆA ROSEA.**—扶桑 *Fu-sang.*—The description given in the *Pen Ts'au* of this Malvaceous plant, the *Fu-sang*, which has given its name to a country placed many thousand miles to the west of China, seems to point to the hollyhock. By some it has been referred to the Hibiscus Rosa-Sinensis. The hollyhock yields a dye and fibres, and is officinal in Greece. Emollient properties are ascribed to this plant in the *Pen Ts'au*, which directs the leaves and flowers to be mixed with white honey, and applied to carbuncles, sores, and swellings of the glands near the jaw. *See Hibiscus Rosa-Sinensis.*

**ALUM SHALE.**—礬石 (*Fan-shih*).—This "alum-stone" is found very pure in argillaceous schist in the provinces of Chehkiang (*Wan-chau-fu*), Hunan and Nganhwui (*Tai-p'ing-fu, Lu-chau fu* and *Fung-yang fu*). Shansi, Sechuen, and Shantung would appear to have formerly supplied this mineral, which is also mentioned as coming to China from Persia, Kwan-lun, and Ta-ts'in. The word *Fan* is the equivalent of our word "salt," conveying to the Chinese the idea of a regularly crystallized mineral substance. Hence other metallic preparations, especially sulphates, are called by this generic name, according to the colour of the particular salt. In this sense the word is very much the equivalent of the old fashioned chemical term "vitriol." As most of these salts are used as dyes, mordants, or sizing agents, the idea of "dye-salts" enters into the ordinary definition of the word *Fan*, though not necessarily. In the district of P'ing-yang, in Chehkiang, the alum-stone, brought from the Sung-yang hills, is deflagrated by throwing the alum-shale into a fire of brushwood, and macerating the residue in vats. The liquor is concentrated in large boilers having iron bottoms and wooden sides, and then poured into reservoirs to crystallize into the large solid masses, which are broken into convenient pieces for purposes of shipment and sale. DR. WILLIAMS, in his *Chinese Commercial Guide*, says that as much as 6,000 tons have been estimated as leaving the district of P'ing-yang in one year. It is exported to India and the Archipelago. The purified article, showing more or less of the characteristic octohedral crystallization of this sulphate of potash and alumina, is equal to the best Roman alum, being free from all trace of iron. It is variously called 明礬 (*Ming-fan*), or 白礬 (*Peh-fan*). The taste is agreeably sharp and styptic, and the reaction acid with test-paper. For medicinal purposes the salt of the shops is re-dissolved by heat, and the solution, purified by filtration through cloth or paper, is evaporated slowly. Cooling, antiphlogistic, astringent, styptic, alterative, expectorant, diuretic, escharotic, detergent, vulnerary, and discutient properties are attributed to this very useful drug. A large quantity is used in the purification of the muddy water of the rivers, which are the principal sources of Chinese water-supply. A small quantity of alum is added to the water collected in large earthen vessels called "kangs," and the whole well stirred up. In a short time the water becomes quite clear, which it would not do in ten times the interval required for the alum-process. The alum is added on medical as well as on chemical considerations. Alum is used in apoplexy, aphonia, and various forms of cynanche, affections of the stomach, tongue, teeth, nose, eyes, and ears. It is prescribed in jaundice, menstrual disorders, fluxes, constipation, ague and diseases of the skin. Pills made by melting alum and yellow wax together, called 礬蠟丸 (*Fan-lah-wan*), are taken internally in a variety of diseases.

**ALUM, FERRUGINOUS.**—鐵礬 (*Tieh-fan*).—This is a faint red, friable mineral, brought from Shansi, said to be an iron-alum, but not used in medicine. A drug which would seem to be an iron-alum, namely 絳礬 (*Kiang-fan*), literally "roseate alum," is merely sulphate of iron, decomposed to a red powder by prolonged heating. Substances resembling the Salajet, or Alum Earth of Nepal, mentioned in the Indian Pharmacopœia, are included under this Chinese name *Tieh-fan*. 羽湼 (*Yú-nieh*) or "feather-alum," is, perhaps, another form of iron-alum met with on the west of China.

**ALUM, BURNT.**—枯礬 (*K'u-fan*), 巴石 (*Pa-shih*).—Ordinary alum, containing 12 equivalents of water of crystallization, is slowly heated until quite dry. The mass is powdered, and is much used as a desiccant powder by Chinese women, to keep their bandaged feet from ulceration. It is applied to spongy gums, to redundant granulations, and to any surface or sore yielding serum, ichor, or pus.

**ALUMINOUS EARTH.**—赤石脂 (*Ch'ih-shih-chi*).—This pale, reddish, friable substance, more or less pulverized, is soluble, to some extent, in dilute sulphuric acid, without effervescence; the solution showing abundant evidence of the presence of iron. An analysis by Mr. J. MORLAND, Junr. (HANBURY's Notes on Chinese Mat. Med.) gives the following composition:—Silica, 42.93; Alumina, 36.53; Oxides of Iron and Manganese, with a trace of Fluorine, 4.85; Magnesia and Lime, 0.94; Water, 14.75; total, 100.00. This shows its composition to be nearly that of Kaolin. This species of Fuller's Earth is included in the *Pen Ts'au* under the heading of 五色石脂 (*Wu-sih-shih-chi*), or "five sorts of unctuous mineral," and will be further described under the articles *Fuller's Earth* and *Lithomarge.*

**AMALGAM.**—銀膏 (*Yin-kau*), 銀脆 (*Yin-ts'ui*).—This mixture of pewter and silver leaf with mercury is directed to be used as a tonic and sedative in affections of the heart and nervous system, and in febrile or urinary disorders. It is also directed for stopping teeth or making false ones. A common plaster made of this amalgam is placed as a patch on the temples as a remedy for headache and other disorders of the cranium. An ore of silver, said to come from Persia, mentioned in connection with this amalgam, and called 錫恡脂 (*Sih-lun-chi*), would appear to be a natural alloy of silver, resembling, perhaps, arguerite, found in South America.

**AMARANTUS.**—天名精 (*T'ien-ming-tsing*).—This identification of TATARINOV'S is hardly borne out by the description of the *Pen Ts'au*, which seems to point to some Composite plant. The leaves are used as astringent, alterative, antiscorbutic, diuretic, expectorant, anthelmintic, vulnerary, and discutient remedies, in conjunction with the young shoots.

**AMARANTHUS OLERACEUS.**—馬齒莧 (*Ma-ch'i-hien*).—This common weed (*Chenopodiaceæ*), whose obcordate leaves are likened, by the Chinese, to horses' teeth, is eaten as a cheap, cooling, spring vegetable by all classes. It is said to contain quicksilver. Cooling, lenitive, antiscorbutic, alterative, vulnerary, and discutient properties are ascribed to it. It is prescribed in ague, infantile dysentery, leucorrhœa, fluxes, dropsies, hæmorrhoids, and all sorts of skin-disease, and is said to be antidotal in arsenical and mercurial poisoning.

**AMARYLLIS.**—山慈姑 (*Shan-tsze-ku*), 茅姑 (*Mau-ku*).—This splendid flowering-plant is to be carefully distinguished from Sagittaria and certain species of Tulipa, sometimes included under this name. The small, shrunken, horny, irregularly ovate bulbs of the plant, with a mass of tangled fibrous rootlets attached to each bulb, are sometimes called 毛殼 (*Mau-kuh*). Slightly deleterious properties are attributed to the bulbs, deprived of the hairy rootlets. It is used by military surgeons in the treatment of strumous diseases, specific diseases of the blood, carbuncles, injuries, hydrophobia, and any disease requiring the exhibition of alteratives. The leaves are used externally as an application to buboes, abscesses and diseases of the breast. The flowers are said to be efficacious in urinary disorders.

**AMBER.**—琥珀 (*Hu-peh*), 江珠 (*Kiang-chü*).—The first Chinese name *Hu-peh* is founded upon the legend that the soul (魄 *Peh*) of the tiger (虎 *Hu*) is changed after death into this substance. It is supposed to be the resin of a Pinus or liquid amber, buried for some thousand years, or, perhaps, some altered fungus. Small pieces of an indifferent colour are brought from Li-kiang fu and Yung-chang fu in Yunnan, but the market is supplied from Annam, the islands of the Indian Archipelago, and, according to Dr. WILLIAMS, from Africa. 阿濕摩楬婆 (*O-shih-mo-k'ieh-p'o*), is given as its Sanscrit name. Cambodia, Corea, and Japan are said to have yielded this substance, whose electrical and chemical properties are tolerably well described in the *Pen Ts'au*. Retinite is probably included under this head. Pieces containing insects, &c., are held in great repute. The best pieces are all made into court-beads and ornaments. Much of what is attempted to be sold is fictitious, being made from colophony and copal. Lenitive, diuretic, sedative, tonic, nervine, astringent and many other fanciful properties are attributed to this inert substance. A dark, jade-like kind of amber called 瑿珀 (*Hi-peh*), said to come from Tangut, yields succinic fumes, and is supposed to be an older fossil than amber.

**AMBER POWDER.**—琥珀散 (*Hu-peh-san*), 琥珀丹 (*Hu-peh-tan*).—The first name is that of a formula directing amber, the shell of the Emys, the roots of Cyperus rotundus, the tubers of Corydalis ambigua, rhubarb and myrrh to be powdered and mixed together into a nostrum, prescribed in urinary disorders, injuries, and certain diseases of uterine fœtal life. The second name is given to a reddish powder, said to be made from amber, seed-pearls and cinnabar, and is used for similar affections.

**AMOMUM.**—蓬莪茂 (*P'ung-wo-shuh*).—These are the pendulous tubers of a Scitamineous plant referred by TATARINOV to Amomum, but answering more to the description given in the *Pen Ts'au* to a species of Curcuma. It grows in the south and in Chehkiang, and is capable of yielding a fecula like arrowroot. The rhizome is prescribed in gastrodynia, pyrosis, cholera, menstural disorders, and internal injuries.

**AMOMUM.**—白芨 (*Peh-kih*).—This Zingiberaceous rhizome is met with in the shape of flattish, irregularly oval, hollow disks, umbilicated on one surface, and having projecting rays at the circumference. The lower convex surface is pointed by a central tubercle, and marked with rings. A great variety of irregular, tri-radiated, and other shapes of these tubers are met with in some samples. The interior is amylaceous, translucent, hard, and white in colour, and has a gummy, bitterish taste. A paste is made from it, and it is rubbed up with ink on special occasions to give it a glaze. It comes from Shensi, Kweichau, Kiangnan, and other provinces. It is prescribed in hæmoptysis, phthisis, ague, fluxes, &c., and is in much repute in the treatment of carbuncles, cancers, fistula ani, wounds, and other injuries, and burns.

**AMOMUM.**—三七 (*San-tsih*).—This Scitamineous plant, named from the irregular arrangement of the leaves ("threes and sevens," answering to the English expression "sixes and sevens"), is brought from Nan-tan chau, in Kwangsi province, and is, therefore, sometimes called 廣三七 (*Kwang-san tsik*). From its extraordinary reputation amongst military and fighting men, the root of this plant is very costly, and is often called 人參三七 (*jin-san-san-tsih*), or 金不換 (*Kin-puh-huan*), names denoting its value. It sells just now at about 12*s.* 6*d.* per ounce. It occurs in tapering pieces of three-quarters to one inch in length. The yellow external surface is wrinkled, marked with small nodules and ridges, and the interior is of a pale yellow colour. The taste is bitter and slightly saccharine, something like that of ginseng. Vulnerary, styptic, astringent, and discutient properties are attributed to this drug in a very high degree. The leaves have similar properties, and are combined with the rhizome.

**AMOMUM AMARUM.**—益智子 (*Yih-chi-tsze*).—This bitter-seeded cardamom is supposed to "increase knowledge," as it benefits the stomach, with which the Chinese connect the disposition and wits of the individual. The species is sufficiently distinct, although not yet described by any competent observer of the growing plant, to be treated as a distinct sort under the name of "Amarum," here introduced. The shrub producing these fruits is said to be found in Cochin China and in Quan-lun kwoh. The Hankow market is supplied from Kau-chau fu (Canton province). The capsules are oval, or ovate and oblique, and pointed at both ends, with a length of from six to nine lines. The external surface is of a dark dull brown colour, hard, roughened, and marked with numerous interrupted, longitudinal ridges. The pericarp has a warm, aromatic taste, depending probably upon an essential oil stored up in certain cavities. This is in marked contrast with the other kinds of cardamom, whose pericarps are generally inert, and are best rejected in the preparation of tinctures. The seeds are large, matted together, irregularly triangular, and amount to about six in number. Their taste is aromatic, very bitter, and slightly like that of myrrh, as Hanbury has remarked. Tonic, stomachic, cordial, and astringent properties are attributed to these fruits in the *Pen Ts'au*, but the principal use to which they are applied at the present time is in the treatment of incontinence of urine, or stillicidium urinæ, and of nocturnal emissions. They are said to be used as a condiment in pastry.

**AMOMUM CARDAMOMUM.**—白豆蔻 (*Peh-tau-k'au*), 東坡豆蔻 (*Tung-po-tau k'au*), 多骨 (*To-kuh*).—This "white cardamom," named after the celebrated poet *Sú Tung-po*, of the Sung dynasty, is the round or Cluster Cardamom of Hanbury. It is said to come to China from 伽古羅國 *Kia-ku-lo kwoh*, a country of southern India. The name *To-kuh* is the name given to it, transferred into Chinese. This evergreen plant, said to resemble the banana, now grows in Canton province, but the Chinese product is admitted to be inferior to the imported drug. The capsules are round, globular, smooth, ribbed, obscurely triangular, and of a brownish-white colour. The seeds are packed together into a globular mass, easily broken into three portions, and have an aromatic, terebinthinate flavour. The seeds are used in pyrosis, vomiting, and dyspepsia, in pulmonary diseases, and in general debility. It is said to be serviceable in ague, in cases of films over the eye, and in the disorders arising from drunken dissipation. According to Hanbury this drug is imported to London from Bangkok in Siam.

**AMOMUM GLOBOSUM.**—豆蔻 (*Tau-k'au*), 草豆蔻 (*Ts'au-tau-k'au*).—This Scitamineous plant, met with in Cochin China, has been described by Loureiro. It resembles the Alpinia galanga in appearance, and bears a magnificent red flower in the axils of the leaves, which are compared to those of the wild ginger. The large globulur capsules furnish the large round Cardamom of English druggists, and also the small round China Cardamom of Guibourt, which is only the unripe capsule, devoid of much flavour, and used by the Chinese as a salted condiment. The Mongol conquerors of China set great store on this fruit as a spice. It comes from *Kwang-chau fu* and *Kau-chau fu*, in Canton province, and from *Kien-ning fu*, in Fuhkien province. The smaller sort is seldom met with in the Hankow drug-market, but the description of Guibourt, confirmed by Hanbury, is perfectly accurate. The large capsules, compared by the Chinese to the fruit of the Nephelium longan, are oval, or roundish, pointed, and usually pedicellated, with a tendency to a triangular outline. The brown pericarp, ridged longitudinally, being almost inert, is seldom met with covering the globular mass of seeds. This coherent three-lobed, greyish or greenish brown mass of angular seeds, each one furrowed on one of its surfaces, has a pleasant smell, like that of a Labiate plant, such as thyme, as Hanbury suggests, and the taste of the seeds is similar. The capsules vary from eight lines to about an inch in length. Tonic, stomachic, carminative, astringent, antiperiodic, and alterative properties are attributed to the decorticated seeds by the authors of the *Pen Ts'au*. It is chewed to correct offensive breath, and, like the flowers of the plant, is reputed to counteract the fumes of wine.

**AMOMUM MEDIUM.**—草果 (*Ts'au-kwo*).—The "coarse fruit" of this species of Amomum, first described by Loureiro as met with in Cochin China, is the ovoid China Cardamom of Hanbury, and is barely distinguished by the authors of the *Pen Ts'au* from the Amomum globosum, under which it is entered. It is grown in *Sz'-ching fu* and *Si-lung chau*, in Kwangsi province, and in Yunnan province. The elongated, oval capsules are compared by the Chinese to the fruits of Terminalia Chebula. They vary from something less than an inch to an inch and three-quarters in length, and exhibit externally some indication of the three-celled character of the fruit. Long coarse pedicles are frequently attached to the capsules. The pericarp is of a reddish or greyish brown colour, closely corrugated, moderately thick and brittle, with a whitish bloom on the surface in many instances. The taste is woody, or but very faintly aromatic. The mass of large, hard, angular, reddish seeds is but loosely attached to the internal surface of the pericarp by membranous adhesions. The seeds have a warm, terebinthinate flavour, and the odour when fresh is said to be strong, like that of the Mylabris insect. A smaller, immature kind of this fruit is called 鸚哥舌 (*Ying-ko-sheh*), or "parrot's tongue." This drug is used in much the same cases as the Amomum globosum, to which it is preferred in the treatment of the various forms of dyspepsia, so common in Central China at least. The seeds only are used, and are given in the form of decoction for affections of the stomach, or as a tincture in ague, catarrh, or other systemic diseases.

**AMOMUM VILLOSUM.**—陽春砂 (*Yang-ch‘un sha*).—This species of Amomum has been introduced from Cochin China of late years, as it is not found in the *Pen Ts‘au*, and the druggists look upon it as identical with the Amomum Xanthioides. It grows exclusively, as far as known, in the district of Yang-chun in Sháu-king fu, in the western part of the province of Canton. HANBURY describes his specimens as growing upon a long, villous, reclinate scape, to the number of some eight or ten fruits on each scape. The samples met with in the Hankow drug-shops have been generally deprived of the husks, but from the examination of the few remaining entire, the capsules are seen to be rounded or oval, somewhat flattened on three sides at the base, and pedicellated. The brown external surface is rugose, and covered with spinous asperities, more or less crushed. The whole length is about half an inch. The ordinary form ot the drug, consisting of the irregular three-sided mass of shrunken, purplish-brown, angular seeds, has an admixture of the seeds of the Xanthioid Cardamom, which are readily distinguished by their plump and bloomy-white appearance. The pericarp and seeds have a warm, bitter, aromatic flavour, compared by HANBURY to that of tar, but more analogous to that of camphor in the samples examined here. The same tonic and stomachic properties are attributed to the denuded and bruised seeds of this plant as to those of Cardamoms in general. They have hardly come into general use in this part of China as yet.

**AMOMUM XANTHIOIDES.**—縮砂蜜 (*Shuh-sha-mih*).—This Scitamineous plant, met with by Dr. WALLICH in Burmah, in Siam by Sir R. H. SCHOMBURGK, and according to HANBURY, in Cambodia and the country of the Laos tribes, is said to have come to China from Persia and Asia Minor. Hence its seeds are ordinarily described as 西砂仁 (*Si-sha-jin*), or "Western sand-kernels." HANBURY describes his specimens as "attached to a common stalk, which, when perfect, is about five inches long, and beset with the remains of sheathing bracts." As met with here, the drug is divided into two distinct portions, prescribed in different diseases. The empty, broken, spherical, brown capsules, frequently pedicellated, varying from half to three-quarters of an inch in diameter, and reticulated or roughened all over with recurved spines, are sold separately as 砂仁殼 (*Sha-jin-kuh*). These are parched, pulverized, and prescribed in affections of the throat and mouth, both topically and internally. The oblong, triangular, compact masses of the seeds of these capsular fruits are sold as 縮砂仁 (*Shuh-sha-jin*). They vary from four to six lines in length, and are covered with a white membrane, which when removed discloses the small black seeds. They have nearly the same flavour as that of the Amomum villosum, whilst the pericarp described above has no smell or taste. These seeds are said by Hanbury to be substituted in the London market for those of the officinal Elettaria (or Malabar) Cardamomum. A great mistake is made in separating the inert husks from the seeds, which are best kept in their natural receptacle. The composition of the seeds of the Amomum cardamomum, Amomum villosum, and Amomum xanthioides is probably very similar, as the Chinese have themselves suggested. A volatile oil and an acrid resin may be assumed to be present as the basis of their chemical and medicinal properties. The Chinese are probably wrong in generally prescribing this drug in the form of a decoction. Tonic, stomachic, astringent, carminative, sedative and tussic properties are referred to the seeds. They are used as a preserve or condiment, are used in flavouring spirit, and are said to hasten the solution of copper or iron cash, fish-bones, or any other metallic or foreign substance accidentally swallowed. This drug is brought almost entirely from *Szʻ-ching fu* and *Yuh-lin chau*, in the province of *Kwangtung*, or *Canton*, the main source of supply of the drugs yielded by Amomaceous plants. It will be gathered from these remarks upon the various sorts of Cardamom, that some of them, on the ground of their efficiency and moderate price, might be introduced into European medical practice. They are placed by Dr. Williams amongst the articles of import, but this is scarcely in agreement with the fact. Although many of the species are originally exotic they can now be supplied to any extent from the south of China, where a most convenient market is afforded by the port of Canton. *See Grains of Paradise.*

**AMMONIA.**—氣砂 (*Chʻi-sha*).—This volatile substance is not known in China apart from *Nau-sha* or Sal Ammoniac, which is said in the *Pen Tsʻau* to be decomposed by lime. Penetrating, corrosive, and powerful properties are attributed to a substance brought from Peh-ting shan, a volcanic mountain beyond the province of Kansuh, or within the limits of the country of *Turfan*. Although hartshorn, the original source of this substance, is largely used in Chinese medical practice, and is sometimes burnt to a powder, it never seems to have occurred to them to submit this substance to destructive distillation. Camels' dung, which contains ammonia, is sometimes burnt to destroy mosquitoes and parasites. *See Volcanic Ammonia.*

**AMMONITE.**—石蛇 (*Shih-shie*).—This "stone-snake," as the Chinese call it, is met with on the sea-coast of *Shau-king fu*, in *Kwangtung* province. The shell is many-chambered, and, in some cases, displays a beautiful pink colour. Those coiling to the left are esteemed the highest. This fossil has sorely puzzled Chinese naturalists, and is theoretically directed to be used as an antidote in metallic and mineral poisoning.

**ANCHUSA TINCTORIA.**—紫草 (*Tszʻ-tsʻau*), 紫丹 (*Tszʻ-tan*), 地血 (*Ti-hiueh*).—The root of this dye-plant, formerly brought from *Siang-yang fu*, in Hupeh, and *Nan-yang fu*, in Honan, is supplied to the druggists from *Ta-ming fu* in Pehchihli, *Tu-yun fu* in Kweichau, and *Pʻing-yang fu*, in Shansi. The colour of the root, which is much darker when it is gathered late in the year, has attracted the attention of the Chinese. This plant is cultivated by the Yau, or T‘ung tribes of Miautsze who live in Li-po hien in Kweichau, and Lien chau in Canton province. The root of this Borage-wort is met with in much the same form as the Alkanet-root of English drug-shops, the purple red cortical portion, in which the active principles probably reside, surrounding the white central part. The word *Tan* given to this drug denotes the importance which the Chinese set upon this root, which is mainly used to assist in the bringing out of the eruption of small-pox and in neutralizing the poison of this and other allied diseases. It is said to act on the blood, deriving to the skin and all the outlets of the body, more especially acting upon the intestinal canal, as well as upon the urinary tract. The red colour no doubt influences the Chinese mind in the selection of this drug for the treatment of small-pox, one of their fiercest epidemics.

**ANDROGRAPHIS PANICULATA.**—黃連 (*Hwang-lien*).—There is reason to believe that this Acanthaceous plant yields some of the two or three varieties of *Hwang-lien*, usually referred to Justicia. *See Justicia paniculata.*

**ANEILEMA COMMELYNA MEDICA.**—麥門冬 (*Meh-men-tung*).—The dried tubers of this plant, according to Loureiro, are included under this name, properly belonging to Ophiopogon japonicus. They have the same properties as the latter, but contain much more starchy matter. Morrison gives 火炭頭 (*Ho-tan-t‘u*), as the name of a wild plant, called Commelyna Bengalensis.

**ANEMARHENA ASPHODELOIDES.**—知母 (*Chí-mú*).—The rhizome of this Liliaceous plant, whose leaves and flowers are said to resemble those of the leek, is brought from Hwai-king fu and Chang-teh fu in Honan, Kiai chau in Shansi, Si-ngan fu in Shensi, Chú chau in Nganhwui, and from Kiangsu. The drug occurs in irregular, flattened, twisted, shrivelled pieces, from two to three inches in length, and generally covered with reddish or yellowish brown hairs which become scaly at the distal extremity. The smaller pieces are usually much wrinkled, scarred, and nearly free from hairs. The interior is yellow, spongy, or mealy, and the whole drug has a slightly bitter taste, and an agreeable odour. Cooling, lenitive, expectorant, and diuretic properties belong to this rhizome, which is used in precisely the same cases as squills are commonly prescribed, and for which drug it would not make a bad substitute. Adenophora is sometimes called by the same name (*Chí-mú*) as this drug.

**ANGELICA.**—前胡 (*Ts‘ien-hú*).—A large variety and quantity of drugs, sold at a considerable price, pass through Hankow from Sech‘uen, Hupeh, and other provinces, all furnished probably by Umbelliferous plants of the sub-order Angelicidæ. It would be an interesting and important study and enterprise, to trace these drugs, upon which such value is placed by natives, to their botanical sources. Following the course suggested by Tatarinov, it has seemed best to arrange them under the uncertain headings of "Angelica" and "Levisticum." The drugs sold under these names are often called 當頭砲 *Tang-t‘u-p‘au*, or "number-one artillery," for the successful attacking of disease. The drug named *Ts‘ien-hú* is met with in brittle, branching, irregular, tapering pieces of a root, probably identical with that of Archangelica officinalis. The external surface is brown, much wrinkled, with hairy rootlets at the growing top of the root-stock, to which a portion of the stem is sometimes attached. The interior is of a dirty white colour, the taste being bitterish and aromatic, and the odour agreeable but not very strong.

The root is compared in the *Pen Tsʻau* to that of the Bupleurum octo-radiatum. It grows in watery places, and is brought from Sechʻuen, Shensi, Hupeh, Hunan, Honan, and Nganhwui. Several varieties, of very different quality, are said to be met with in the market. Stomachic, tonic, carminative, expectorant and lenitive properties are attributed to this drug.

**ANGELICA ?**—獨 活 (*Tuh-hwoh*).—The dried root of this "self-moving" Umbelliferous plant comes to Hankow from Siang-yang fu and Lau-ho-kʻau, situated on the Han river. It is in long, twisted pieces, deeply marked with ribs or striæ, both lengthwise and crosswise, with portions of the crowning leaves of the root-stock sometimes still attached. The exterior surface is of a dark or yellowish brown colour, and the interior open in texture, and of a dirty white colour. The odour and flavour resemble the umbelliferous qualities of the *Tsʻien-hu*, but are not very powerful. Lung-si hien in Kansuh is mentioned in the *Pen Tsʻau* as the source of this and of another somewhat similar drug, to be directly described, and with which the *Tuh-hwoh* is generally conjoined in prescriptions.

**ANGELICA ?**—羌 活 (*Kiang-hwoh*).—This Umbelliferous plant now brought from Sechʻuen, Shensi and Kansuh, is named after Kiang, a country or tribe in ancient Tangut. It is much darker than the root of the *Tuh-hwoh*, and is marked off into short internodes of nearly three-quarters of an inch in length by rings, or ridges of tissue, which indicate joints. This is less apparent in some samples, which are probably mixed. The interior, yellow, woody tissue is very brittle, and loosely arranged in wedges, somewhat like that of Menispermaceæ, a thickness of red cortical fibre intervening between the vascular bundles and the epidermis. There is a variety of this drug, brought from Sechʻuen and called 川 羌 *Chʻuen-kiang*, which differs but little from the *Kiang-hwoh*. It has a very agreeable, almost musk-like odour, is smaller than the *Kiang-hwoh*, and usually bristled with hairy radicles. These drugs, *Tuh-hwoh*, *Kiang-hwoh* and *Chʻuen-kiang* are administered as rousing, stimulant, arthritic, antispasmodic, and derivative remedies. Catarrh, rheumatism, weid, apoplexy, leprosy, and toothache are samples of diseases in which these drugs are adminstered.

**ANISE.**—蘹 香 (*Hwai-hiang*), 土 茴 香 (*Tʻu-hwui-hiang*), 小 茴 香 (*Siau-hwui hiang*).—This aromatic, Umbelliferous plant, growing in Kansuh, is confounded with fennel, and is described in the *Pen Tsʻau* in connection with the Illicium anisatum, or Star-anise, which see.

**ANTELOPE HORN.**—羚 羊 角 (*Ling-yang-koh*).—The horn of a kind of chamois, usually set down as the Antelope gutturosa, is brought from Lung-ngan fu in Sechʻuen, Shi-nan fu in Hupeh, Han-chung fu in Shensi, and from the ill-defined province of Kansuh. A country called 阿 丹 國 (*O-tan kwoh*) is said to have a sort with a continuation of the dewlap passing along the under surface of the belly to the tail. The character representing this animal consisted of the two characters for "deer" and "spiritual" combined. It is said to hang itself up in trees by its horns. It is described as like a sheep with coarse hair, which renders its skin valuable for making coverings for beds or seats. A kind of "wild ass," or *Shan-lu*, is described in connexion with it. A kind of unicorn belonging to this species of antelope is said to be met with on a mountain in Annam. The specimens sold in Hankow are about five inches long, of a dirty white translucent colour, with several partial rings marking the base of the horn, which is about the size of a man's thumb, tapering off gradually to a point, with a single spiral twist. The horn is given in coarse powder, or after being partially calcined, as a remedy in convulsive, apoplectic, cerebral and rheumatic affections. It is said to hasten the pains of labour when given in wine. Most of these properties are mere conceits, but women are very fond of taking this medicine in sundry diseases of the pregnant and puerperal states.

**ANTHEMIS.**—苦菊 (*Kʻu-kiuh*), 黃菊 (*Hwang-kiuh*).—The heads of flowers of several Composite flowers, more especially of the genus Chrysanthemum, are sold under the name of *Kiuh-hwa*. BURNETT in *Murray's China*, gives Anthemis apiifolia as an ascertained species in China. Honan, the garden of China, seems to yield several plants of this kind. They are divided into *Kʻu*, or "bitter," and *Kan*, or "sweet" What is used in the Mission Hospitals of Hankow and Canton as chamomile-flowers are not so, as their name *Kan-kiuh-hwa* (甘菊花) would indicate. Still they answer the purpose equally well as an external application. The flowers, though directed to be used in catarrh, rheumatism and other diseases, are now exclusively used as a wash for sore or inflamed eyes. *See Chrysanthemum album* and *Matricaria Chamomilla.*

**ANTIMONY.**—白鑞 (*Peh-lah*).—The name given here signifies the bright appearance, resembling that of insect-wax, or spermacceti, and is used in the *Pen Tsʻau* in connexion with a peculiar kind of pewter or Britannia metal, samples of which, called 點銅錫 *Tien-tʻung-sih*, have yielded evidences of the presence of antimony. The *Pen Tsʻau* says that this *Peh-lah* is brought from what is now Lin-wu hien, in Kwei-yang chau in Hunan, and is very different from tin or pewter. It also mentions that wine allowed to turn sour in pewter cups becomes deadly poisonous. This would indicate the presence of antimony, or arsenic. The sulphide of antimony is met with in some parts of China, and Zinkenite, an ore of lead obtained from a mine some fifteen miles from Chefoo, yielded 38 per cent of antimony. This latter metal is said to be met with in the rich mineral districts of Chinkiang fu.

**APOCYNUM JUVENTUS.**—何首烏 (*Ho-shau-wú*).—The root of this species of Dogbane is supplied from Sü-chau fu, and Tʻung-chau (Kiangsu), Sháu-king fu (Kwangtung), and Kwei-lin fu (Kwangsi). It is commonly sold in flat, oblong or round pieces, often of a very irregular shape and thickness, their outline being crenated for the most part, showing a tendency to the distribution of the vascular tissue into five concentric portions round the central mass. The cuticle is shrivelled, and of a dark reddish-brown colour, and the interior woody structure of a rufous tint. The taste is rough and bitterish. Fabulous stories are told in the *Pen Tsʻau* of the powers of this root to bless men with long life, vigour, and numerous offspring. Tonic, astringent, vulnerary, styptic, antiscrofulous and discutient properties are referred to this root. The leaves, stalks and root are used as applications to sores, eruptions, bald patches, &c., in the form of a wash.

**APPLE.**—蘋果 (*Pʻin-kwo*(, 花紅 (*Hwa-hung*).—The crab-apple is common in Central China, but perfectly uneatable. The apple is not distinguished from the bullace, or from the fruit of certain species of Sterculia. Honan would seem to have possessed cultivated kinds of the apple. The tree is mentioned in the *Kwang-kiun-fang-pú*. It appears to have been long cultivated in Pehchihli, at Shun-teh fu and Ho-kien fu. The first name here given, *Pʻin-kwo*, is use in the West Indies as a purgative, and has recently been strongly recommended by Dr. WARING as a mild, painless purge in constipation and colic, when freshly prepared. The oil is said to allay the irritation of herpes and many other eruptions of the skin. The Chinese appear to be ignorant of the properties of this plant.

**ARGENTAN.**—白銅 (*Peh-t'ung*).—This alloy of copper, zinc, nickel, and arsenic, varies a good deal in composition, according to the researches of the French delegates. Silver is met with in some specimens. The medical importance of this "white copper" lies in the fact that as arsenic is contained in it, and a favourite mode of committing suicide amongst Chinese females is to swallow their head-ornaments, often made of this metal, the symptoms of arsenical poisoning may be looked for. It is also used to make washing-basins.

**ARGILLACEOUS EARTH.**—滑石 (*Hwah-shih*).—This substance, described by HANBURY as 飛活石 (*Fei-hwoh-shih*), is a finely-levigated powder derived from this unctuous, friable earth, often occurring in compact masses. It is of a pale yellowish colour, and put up in small rectangular blocks, like the *Kwang-fen*, or levigated marble. It is used as a chalk for drawing, and as a corrective, deobstruent, lithontriptic and alterative remedy, acting on all the abdominal organs. Several silicates of alumina and magnesia are evidently included under this name of *Hwah-shih*, in the *Pen Ts'au*. Kwei-lin fu (Kwangsi), Chang-sha fu (Hunan), and Tanǵ-chau fu (Shantung), appear to yield these aluminous substances.

**ARISŒMA TRIPHYLLUM.**—半夏 (*Pwan-hia*).—It appears that species of Arisœma and Pythonium, very acrid and caustic plants, belonging to Araceæ, are included in the *Pen Ts'au*, along with Pinellia tuberifera, and Arum macrorum. They enter into the composition of some of the formulæ employed for destroying the sensation of parts to be operated upon. *See Ma-yoh*, or *Mei-yoh*, under Chloroform.

**ARISTOLOCHIA CONTORTA.**—土青木香 (*Tu-ts'ing-muh-hiang*).—The dried, light brown roots and smaller branches of this scandent plant are met with in the drug shops, and are described in the *Pen Ts'au* under the same heading as the Aristolochia Kœmpferi. They vary from the size of a goose-quill to that of a man's thumb, or even larger, and show the peculiar wedge-like arrangement of the vascular tissue, characteristic of Aristolochiaceæ. This drug is brought from Siang-yang fu and Han-chung fu, in the provinces of Hupeh and Shensi respectively. It is a powerful purgative, emetic and anthelmintic remedy, principally used as a remedy for snake-bites, being employed both externally and internally.

**ARISTOLOCHIA KŒMPFERI.**—馬兜鈴 (*Ma-tau-ling*).—The dry, oval, pedicellated fruits of this climbing plant are brought from Wu-ting fu in Shantung. They are of a dark brown colour, from one to one inch and a half in length, generally broken, showing the division by six thin, papery valves into as many cells, packed full with small, flat, roughly-triangular, winged seeds. They are compared by the Chinese to "horse-bells," and as the open cellular structure resembles to their eyes that of the human lung, the drug is strongly recommended in all pulmonary affections. It has very little taste or smell. The seeds are generally used.

**ARMENIAN BOLE.**—五色石脂 (*Wu-sih-shih-chi*), 五色符 (*Wu-sih-fu*).—Unctuous earths of various shades of red and other colours, are met with in China, resembling the celebrated Boles of Blois, Silesia, Lemnos, Armenia aud other places. They do not effervesce with acids, are astringent, contain silicate of alumina, and a varying proportion of iron and magnesia. The red varieties, answering to Armenian Bole, and the white varieties, answering to Lemnian Earth, are in greatest request, and were formerly brought from Su-chau, and neighbouring places in Kiangsu. Tsz' chau in Pehchihli, and Lúngán fu in Shansi, places yielding much iron, are said to produce this drug. Fullers' Earth is evidently not distinguished from these Boles. They are always carefully levigated for medicinal use, and sometimes previously calcined. They are given in fluxes, pyrosis, prolapsus recti, jaundice, incontinence of urine, &c., and used as a desiccant or stimulating application to sores. See Aluminous Earth, Fullers' Earth and Lithomarge. DUHALDE speaks of a Lapis Armenus met with in Yunnan and Sech'uen, which he describes as a white, translucent stone, like jasper.

**AROIDEÆ.**—白附子 (*Peh-fu-tsze*).—An uncertain species of Aroid plant, brought from Fung-t'ien fu in Shingking, is correctly referred to this order by TATARINOV. It is called "white futsze" to distinguish it from the root of the Aconite. The tuberous, oval, elongated roots sold by this name, vary a good deal in size, as from an inch to two inches in length. The epidermis is of a brown colour, mottled, withered and reticulated. The interior is pure white, starchy, but firm in texture. It is said to have been originally imported from Corea and Sin-lo. The plant grows in sandy soil, and is evidently deleterious, although but a very slight degree of acridity seems to exist in the drug. It is said to be useful in apoplexy, aphonia, wry-neck, paraplegia, choreic affections, heat-apoplexy, and similar diseases. It is principally used at the present time as a face-powder, to remove pock-marks, stains and pigmentary deposits. The powder is used as a desiccant in scabious and other eruptions. Many of the drugs in former use having undoubted effects in internal diseases, are now seldom used by the faculty, save as external remedies, from utter ignorance of their own pharmacological literature.

**ARROW-ROOT.**—耦粉 (*Ngau-fen*).—The ordinary native farina called by this generic name amongst foreigners, is made by grating the root of the Lotus, or Nelumbium speciosum, 耦根 (*Ngau-ken*), grinding it to a coarse powder, and levigating it in the ordinary way. The best native arrow-root comes from Kwang-sin fu and Ning-tu chau in Kiangsi, and from Hang-chau fu in Chehkiang. The process is not mentioned in the *Pen Ts'au*. The product is a reddish-white, glistening, unctuous powder, making a very tenacious jelly of a dark colour. It answers all the purposes of the best arrow-root, and is of great value in the treatment of diarrhœa and dysentery. It is given in diseases of the chest, and is an important ingredient in the article of food called 三合粉 (*San-hoh-fen*), used in the rearing of dry-nursed infants. The article as purchased in the shops is so frequently adulterated with leguminous farina, that most families endeavour to make it for themselves. The starch-granules, as seen under the microscope, are mostly elliptical, and unlike in size and shape, very much as these of potato starch. The powder should not be very white. 馬蹄粉 (*Ma-tih-fen*), is a coarse kind of arrow-root made from the tubers of the Eleocharis (Scirpus) tuberosus, a Cyperaceous plant. 厥粉 (*Kiueh-fen*), is a farina made from the root of an edible Fern, probably Pteris esculenta. 山藥 (*Shan-yoh*), or the tubers of Dioscorea sativa yield a starchy fecula.

**ARSENIC, COMPOUND POWDER OF.**—土黃 (*Tʻu-hwang*).—This is a composition directed to be made from Muricia seeds, Croton beans, Sal Ammoniac, crude Arsenic, Bitumen and the oil of Muricia seeds. This mixture is to be put into the ground for seven weeks, and then taken up and divided into small pieces. This is a caustic preparation for destroying growths, proud flesh, and glandular tumours. This is the favourite mode of dealing with such surgical cases with the majority of Chinese surgeons.

**ARSENIC, SUBLIMED.**—砒霜 (*Pí-shwáng*), 白信石 (*Peh-sin-shih*).—This is the native white arsènic, or yellow arsenic sublimed into a white, mammiform mass of crystals, tinged with a pinkish shade in places. The sharper, smaller crystals are in highest repute, although the raw mineral is said to be preferable in the treatment of internal disease. The neighbourhood of the works, situated in Kwangsi, testifies to the poisonous nature of the fumes, which destroy herb, man and beast. This preparation is used to cure ague according to the *Pen Tsʻau*, but very few of the practitioners of the present day venture to prescribe it. Caustic, emetic, anthelmintic and alterative properties are set down as the effects of this powerful drug. The water of the Phaseolus angulatus is said to be antidotal of this poison. Bottles exposed to arsenical fumes are said to preserve wine kept in them for a long time. Chinese crackers are said to be much louder when containing a portion of this sublimate. Asthma is said to be relieved by small doses of this drug, but it is distinctly forbidden in all sorts of eruptions and sores! It is recommended in chronic dysentery along with massicot, and in sundry pains and aches of a neuralgic or rheumatic nature.

**ARSENIC, WHITE.**—砒石 (*Pí-shih*) 白信石 (*Peh-sin-shih*).—This native mineral is said to be met with in the neighbourhood of copper-mines. Kwang-sin fu in Kiangsi furnishes the greater part of the arsenic of commerce, and gives its name of *Sin* to this mineral. There is said to be a mine or pit in the *Yuh-shan*, at Kwang-sin, under the control of the authorities. It occurs in traslucent, crystalline masses, of a reddish, yellowish or greyish white colour, some portions being perfectly white. Many of the specimens sold under the name Pí-shih, are samples of sublimed arsenic. Preference is given in the *Pen Tsʻau* to the natural mineral, especially the yellowish variety to be directly described. The process of sublimation is very simple, as given in the *Pen Tsʻau*, but the action or addition of fire in the process is supposed to develope the poison of the mineral. Arsenic and antimony, as entering into the composition of pewter, or Britannia metal, are dimly associated together by Li Shí-chin, the editor of the *Pen Tsʻau*, the second being derived from the first. Recent chemical works place these two allied metals together in one class, the pentad metals. None of these arsenical preparations are sold in shops without evidence and witnesses to the propriety of the sale. The punishment of death by decapitation is inflicted upon both the seller and the buyer if fatal effects result. It not fatal they are both strangled. If the druggist ignorantly or carelessly sells the poison, he receives eighty blows. Antiperiodic,tonic, alterative, expectorant and insecticide properties are ascribed to this mineral.

**ARSENIC, YELLOW.**—砒黃 (*Pí-hwang*).—This heavy native mineral is met with in crystalline, translucent masses of a yellowish or reddish brown colour, showing traces of octohedral crystallization on the fractured surface. Its colour and grain are not inaptly compared by the Chinese to the appearance of raw beef. It comes from the same prefecture in Kiangsi as the other arsenical substances, and yields pure arsenious acid by sublimation. The character 砒 (*Pi*) or 磇 (*Pi*), is derived from 貔 (*Pi*), the name for a fierce feline creature in Liautung. This drug is given in just the same cases as the crude white arsenic, and is applied to strumous glands in the neck, in much the same way as Dr. Fell recommended his caustics to be inserted into incisions made over malignant growths. This substance is little used at the present time. While I write this article, a physician of long standing is lying in the Han-yang gaol, as a penalty for having dared to use arsenic in a very bad case of ague in a child, who died after it. The mineral is powdered and used to polish copper and pewter articles, which it does most effectually. In making Peking tobacco, and in the assaying of silver, small portions of arsenious acid are added, according to Lockhart. Cases of poisoning by these substances are creditably rare in China.

**ARTEMISIA ABROTANUM.**—茵陳蒿 (*Yin-chʻin-hau*).—This Composite plant is cultivated in most parts of China, and is met with in the wild state, the young shoots being made into cakes with meal. Many of these plants are used as fuel, and the ashes are used to make an alkaline lixivium, or a potash, brought from Tsi-ning chau in Shantung. This fragrant bitter herb is made into a broth and given in catarrhs, fevers, ague, rheumatism, jaundice and dysuria. Several other unrecognizable species are given in the *Pen Tsʻau.*

**ARTEMISIA DRACUNCULUS.**—青蒿 (*Tsʻing-hau*).—The "green herbage" of this aromatic plant which grows so abundantly in all waste places in Hupeh, is sometimes eaten as a vegetable. The leaves, root, stalks and seeds are officinal in skin diseases, arthritic affections, fluxes, and vermes.

**ARTEMISIA MOXA.**—艾 (*Ngái*), 醫草 (*I'-tsʻau*).—This herb is hung up with the Acorus calamus over the doors of every Chinese house on the fifth day of the fifth month. Although its principal use is as a counter-irritant, this plant is in general repute as a charm, or remedy in internal diseases. The downy leaves are collected, dried and rolled into a small ball, which is ignited upon the skin, in order to cauterize the part. The heat of the sun's rays collected by a mirror or glass is said to be the proper way of igniting the moxa. This form of cautery, called 艾火 (*Ngái-ho*), was formerly applied indiscriminately in all cases of disease. In Hupeh, at least, the moxa has fallen into disuse, as it is employed by the Buddhist priests in initiating their neophytes. The 燈火 (*Teng-ho*), or lamp cautery, and the bloody cupping-vessel, called 巴火鑵 (*Pa-ho-kwan*), have replaced the moxa to a very great extent. The plant itself is used as a carminative, stimulant, stomachic, astringent, alterative and resolvent remedy. The supply comes from Chin-ting fu in Pehchihli, and a reddish variety called 紫艾 (*Tsz'-ngái*), comes from Fung-yang fu in Nganhwui. The best, called 蘄艾 (*Ki-ngái*), comes from Kʻi-chau, in Hwang-chau fu (Hupeh). A solid substance used as a febrifuge is mentioned by Dr. Williams in his Chinese Commercial Guide, as a kind of camphor, extracted from the leaves of Artemisia. The crystals are limpid and brittle, and present a brilliant fracture. It is probably identical with a solid volatile stearoptene, called 艾納香 (*Ngái-lah-hiang*), formerly brought as a tribute from some foreign state. It is said to be disinfectant, cooling, astringent and anthelmintic.

**ARTOCARPUS INTEGRIFOLIA.**—波羅蜜 (*Po-lo-mih*).—The amylaceous pulp and seeds of this delicious fruit, called the Jack-fruit, are mentioned in the *Pen Ts'au* as having cooling, tonic, nutrient and anti-vinous properties. It comes from Tai-wan fu (Formosa), Cháu-chau fu (Kwangtung), and Wu-chau fu (Kwangsi). Annam, Persia, Fuh-lin, and countries to the south of China are mentioned as habitats of this curious tree, which differs somewhat from the well known Bread-fruit tree (Artocarpus incisa). This *Po-lo-mih* is to be distinguished from the *Po-lo-ma*, a hemp-fibre produced by a Triumphetta. An allied species (Antiaris saccidora) of this same order produces a fibre utilized in making sacks.

**ARUM MACRORUM.**—半夏 (*Pwan-hia*).—This is given on the authority of TATARINOV, as an identification of certain specimens of *Pwan-hia*, described in this work on the authority of SCHOTT of Vienna, as the tubers of Pinellia tuberifera, or Midsummer Root.

**ARUM PENTAPHYLLUM.**—虎掌 (*Hu-chang*), 南星 (*Nan-sing*), 天南星 (*T'ien-nan-sing*).—The tubers of this Aroid plant are brought from Lung-ngan fu in Sech'uen, and are called "tiger's paws" from the short palmate leaves which bear some likeness to the animal whose name the Chinese are fond of applying to anything violent, like this beast. The other names are given from the resemblance of the compound tubers to the constellation Canopus. The hard yellowish brown, or whitish, tubers are flattened, roundish, and generally divided into small branching tubers, grouped round the central portion, which is umbilicated and marked with pits and tubercles. The smaller specimens, and the side tubers of the larger ones, resemble the tubers of *Pwan-hia*, or Midsummer Root. The cicatricial remnant of the stalk is often seen in the umbilicus of the tubers. The interior firm, starchy, white substance has a considerable acridity when chewed in the mouth for some time. Alterative, deobstruent, expectorant, diuretic, discutient and vulnerary properties are attributed to this poisonous drug, formerly much given in apoplexy, hemiplegia, Bell's paralysis and many other diseases supposed to depend upon the presence of phlegm. It is very little used internally at present, from a wholesome dread of the effects of a drug which seems to have some effect. It is pounded and mixed up with vinegar, or oil and applied to small tumours or swellings. This drug is also an ingredient in certain prescriptions for making 麻藥 *Ma yoh*, or local anæsthetic compounds, to be applied to painful growths, or to abscesses previous to their being opened by those who are bold enough to venture upon such a surgical procedure. Sedative and benumbing properties resembling those of Aconite-root seem to reside in these tubers. They are worth a trial in cases of ringworm and other skin-affections, as a local application.

**ASBESTUS.**—不灰木 (*Puh-hwui-muh*).—This curious substance, or more properly Amianthus is met with in Lu-ngan fu (Shansi), at Yuh-tien hien (Pehchihli), at Man chau (Sech'uen), and, according to the Rev. A. WILLIAMSON, at King-kwo shan and Law-sz' shan, in the coal-district of Shantung. It is very fibrous, and is used to make lamp-wicks, fire-stoves, fire-bricks and crucibles. Clothing for firemen might be made of this substance, which is worth the attention of foreigners. Certain fossil pines, and perhaps retinite, are confounded, or included in the account of this substance, which is recommended, on theoretical grounds, to be given in pulmonary and abdominal diseases. See *Asbestous Tremolite.*

**ASBESTOUS TREMOLITE.**—陽起石 (*Yang-k'i-shih*).—This variety of hornblende, or greenstone, is scarcely to be called an Asbestus, as it is by some writers. It is brought from Tsí-nan fu, in the northern part of Shantung, where there is a hill called Yang-k'i shan. It occurs in irregular masses of a white or greenish-grey colour, the tremolite being aggregated in conical, radiated, lustrous masses, embedded in a dull greyish, or yellowish white matrix. It emits a peculiar earthy odour when breathed upon, but has otherwise little odour or flavour. The mine of supply is regulated by an officer, who only allows it to be open at a certain time in winter. Cooling, alterative, tonic, astringent and aphrodisiac properties are attributed to this inert silicate of magnesia and lime. Any nocturnal disease is treated by this medicine, which is supposed to develope the *Yang* principle, as its name indicates. It is supposed to stimulate the uterine system, and is prescribed accordingly.

**ASH-TREE.**—櫧 (*Ch'ü*).—Species of Fraxinus are apparently referred to in the *Pen Ts'au* under this name. 甜櫧 )*T'ien-ch'ü*) is perhaps the Fraxinus ornus. It is the tree on which the wax-insect is said to feed in part, and may be the species described by ROXBURGH as the Fraxinus Chinensis, growing in Chehkiang. Tonic, alterative, and astringent properties are attributed to the fruit, bark and leaves of this excellent timber-tree. Its boards are said to be very suitable for making coffins.

**ASSAFŒTIDA.**—阿魏 (*O-wei*), 興渠 (*Hing-k'u*)—This drug was formerly in much request, but is scarcely to be met with in Hupeh. It is an export, according to Dr. WILLIAMS from Bombay, but the quality is inferior. Its rarity, in the genuine amygdaloid form, is such that there is a proverb to the effect that "Of assafœtida there is none genuine, of scull-cap (a common herb) there is none sophisticated." Garlic, the placenta of a lying-in woman, or a dead fœtus, is actually boiled in water, and evaporated to produce some abominable compound, as a substitute for this stinking drug. The Mongols, who used it with meat as a condiment, called it 哈昔泥 (*Hah-sih-ni*). The Persian name given it is 阿虞 (*O-yü*), the first character being the exact equivalent of the English interjection O, supposed to be uttered over this stinking gum-resin. 央匱 (*Yang-kwei*) and 形虞 (*Hing-yü*) are quoted in the *Pen Ts'au* as Sanscrit names rendered into Chinese characters. Turfan, Cashmere, and the countries of North India, and of Central Asia, including *Hai-ya kwoh* (Herat) and *Sha-luh*, are its sources. The drug is said to be the exudation of both a plant and a tree, that prepared by pounding and boiling down the root being esteemed superior to the simple exudation of the cut root. The yellow-grained samples are said to be the best. Siamese and Sumatran assafœtida are said to be collected like gamboge, with which they are perhaps confounded. Chang-ho in Yunnan, Chehkiang and the prefecture of Canton would appear to have the genuine species of Narthex growing within their limits. Several tests for proving the genuineness of the article are given. It should colour a copper vessel with a white mark, after being kept in it for a night. Deodorizing, anthelmintic, carminative, cordial, alterative, anti-spasmodic, deobstruent, alexipharmic and anti-periodic properties are ascribed to this drug. It is said to assist the digestion of all meats, and to correct the poison of edible fungi and herbs. Dr. WILLIAMS says that it is given in syphilitic complaints, and to opium-smokers wishing to give up the drug. Experience in Hankow has scarcely confirmed the latter practice. The genuine drug is undoubtedly one of great utility.

**ASSES' GLUE.**—阿膠 (*O-kiau*).—The drug going by this name is sold in flat, rectangular cakes, two inches by one and one third of an inch in size, and three or four lines in thickness. It is reddish and translucent, with all the properties of common glue. The cakes are wrapped in rouge-red paper, as is usual with all expensive drugs. The name Asses' Glue is an incorrect and ridiculous translation of the Chinese name, for the genuine drug is properly the extract prepared by boiling down the waters of a celebrated well, at a place sixty *li* to the N.E. of the district city of Yang-kuh, in Kwan-chau fu (Shantung). This town was anciently called *O yih*, or *A-yih*, and the well was named after it. The well, as large over as a wheel, and sixty or seventy (Chinese) feet deep, contains a water probably like that of Barèges in France, which has a gelatinous principle in it, conferring peculiar properties on the water. As hartshorn, cow-hide and the skin of a black ass are said to be often used to make this variable article, which is used by artists and by others than carpenters to join articles together, the power of this water to produce such a substance will be perhaps doubted. Yun-ching hien in Tsʻáu-chau fu (Shantung), is also said to supply the glue, but the waters of the *O-Tsing* are said to be taken there to make it. The best glue is clear, amber-coloured and free from smell or damp. Tonic, astringent, tussic, emmenagogue, arthritic, sedative and diuretic properties, among others, are attributed to this "perfect medicine," as Li Shi-chin calls it.

**ATRACTYLODES.**—朮 (*Shuh*).—Several species of this genus of Composite plant, belonging to the same sub-group as the Aucklandia costus, are evidently met with in China. Hoffman and Schultes enumerate A. lancea, A. lyrata and A. ovata. The market is supplied from Yun-yang fu (Hupeh), Tsí-nan fu (Shantung), and Kiang-ning fu (Kiangsu). The editors of the *Pen Tsʻau* divide the genus *Shuh* into the white or sweetish kind, and the red or bitter sort.

**ATRACTYLODES ALBA.**—白朮 (*Peh-shuh*), 於朮 (*Yü-shuh*).—The root of this shaggy, Cynaraceous plant, with large, amplexicaul leaves, is brought from Ning-kwoh fu (Nganhwui), and Hang-chau fu, Hu chau fu and Tai-chau fu, (Kiangsu). It is met with in hard, contorted, fleshy, round pieces, about an inch or an inch and a half in diameter, and having radicular fibres between the tuberous nodules forming the mass. Some of the pieces resemble the red kind (Atractylodes rubra) to be presently described. The outer surface is brown and wrinkled, and internally the softish woody tissue is of a mixed white and yellow colour, which deepens after a short exposure to the air. The odour is strongly aromatic, and the taste aromatic, with perhaps a slight sweetness. A tea is made from the shoots. The drug brought from Yü-tsien hien in Hang-chau fu (Chehkiang) is sometimes distinguished as *Yü-shuh*, but is not different from the common article. This is a warm, stomachic, stimulant, arthritic, tonic, and diuretic remedy, used in catarrh, chronic dysentery, general dropsy, rheumatism, profuse sweatings and apoplexy. It is made into powders, pills, tincture, &c., and an extract is prepared from it, with or without the addition of ginseng-root.

**ATRACTYLODES RUBRA.**—蒼朮 (*Tsʻang-shuh*), 赤朮 (*Chʻih-shuh*).—This species or variety of Atractylodes (or Atractylis) is brought from the places mentioned under the general name *Shuh*. The leaves of the tree are said to be smaller than those of the white variety. The roots are met with in finger-shaped, roughly-moniliform pieces, occasionally branching, and varying from one to three inches in length. The cuticle is rough, brown, or blackish, and sometimes bristled with rootlets. The cut surface is of a dirty white colour, with a yellowish cortical layer. The structure is very open, and some of the interstices are filled with an orange-coloured resinous substance, which dissolves in strong spirit, making a yellow tincture. The smell is less aromatic than that of the white variety, and the taste warm and aromatic, with some bitterness. This drug contains a larger portion of the acrid resin, which is nevertheless present in the *Peh-shuh* as well. It is given in much the same diseases as the white variety, but is supposed to be more strengthening, to tend to longevity, and to have some good effect in diseases of the eye.

**ATRACTYLODES.**—平朮 (*P'ing-shuh*).—This is a variety of the root of the *Shuh* called *p'ing* or "even," because its qualities are neither pungent nor cooling. It occurs in irregular, brown, wrinkled or warty rhizomes, with portions of the stalk attached to the upper part. The interior is moist, soft, and of a brown colour. The smell is aromatic, and the taste sweet and aromatic. It is given in the same diseases as the *Peh-shuh.*

**ATTAR OF ROSES.**—玫瑰油 (*Mei-kwei-yú*).—See *Oil of Roses*, and *Rose-water*.

**AUCKLANDIA COSTUS.**—木香 (*Muh-hiang*), 廣木香 (*Kwang-muh-hiang*).—This Costus root, identical with the Aplotaxis auriculata of De CANDOLLE, is brought from Calcutta and Bombay to Canton, and is hence called *Kwang-muh-hiang*, or *Nan-muh-hiang*, as coming from the southern province of Kwangtung, or Canton. From the researches of Dr. FALCONER it appears that this fragrant root is raised in the highlands of Cashmere. Yung-chang hien in Kansuh is said to have formerly yielded this drug, and a root called *Kwang-hiang* is produced in Honan fu (Honan), which is probably this same drug. *Puchuk* and *Putchuk* are Cantonese names for this root, which is called Koot by the natives of India and Cashmere. The Chinese confound it with Aristolochia-root, and describe it as having leaves like the dock India and Syria, or some part of the Roman empire, with the inevitable Kwan-lun district, are said to yield this foreign drug. The drug is met with in dry, brown, broken pieces, having much the same appearance as so many old broken pieces of decayed bones. The smell is very fragrant, and the taste bitter, pungent, aromatic, and slightly mucilaginous. It is used in making incense in the south, or to preserve clothes from the attacks of moths and other insects. It is said to have the power of turning grey hair black. Carminative, stimulant, antiseptic, prophylactic, astringent, sedative and insecticidal properties are referred to this remedy. Indian experience seems to suggest the desirability of trying this root when powdered as a substitute for opium in obstinate cases of opium-smoking. The Chinese apply it with musk, which it resembles in odour and properties, to aching teeth.

**AZALEA.**—羊躑躅 (*Yang-chih-chuh*).—The Chinese botanists having observed that several Ericaceous and Solanaceous plants, having stamens whose anthers open by pores at the apex, are strongly narcotic, have lumped together species of Azalea, Andromeda, Rhododendron and Hyoscyamus under this heading. TATARINOV, after HORANINOV, refers the synonym 鬧羊花, (*Nan-yang-hwa*), as well as *Yang-chih-chuh*, to Hyoscyamus. These names refer to the effects of the flowers or herbage of all these narcotic plants upon sheep and goats feeding upon them. The ordinary Hankow samples consist of flowers of Andromeda polifolia, and Azalea species, sold under these two names. Azalea procumbens grows profusely on the hills in Hupeh and Kiangsi, and is called 老虎花 (*Lau-hu-hwa*). Azalea pontica is 黃杜鵑 (*Hwang-tu-kiuen*), and is very poisonous. The smell of the fresh flowers of both of these species of Azalea is said to be injurious. 山躑躅 (*Shan-chih-chuh*), is properly a synonym of Azalea procumbens, and some other red-flowered species of Azalea, most probably inert. These flowers are given as sedatives in rheumatism, painful paralysis, bronchitis and any contraction of the limbs. Mixed with powdered aconite-root or arum-root, these flowers are applied to the gums in toothache, and to allay the pain of an abscess, preparatory to opening it. Prophylactic and alexipharmic properties are attributed to all these poisonous plants, on the homœopathic principle that a poison must be counteracted by a poison.

## B

**BALSAM.**—鳳仙 (*Fung-sien*), 急性子 (*Kih-sing-tsze*), 染指甲草 (*Yen-chi-kiah-ts‘au*).—Several varieties of Impatiens balsamina are met with in China. The irritable character of the seed vessels is admirably expressed by the Chinese charactes *Kih-sing-tsze*, as well as by the Latin word given to the species by the imaginative LINNÆUS. Some confusion has occurred between this plant of the Centre and North of China in particular, where, *in combination with alum*, it is used by girls to dye some or all of the finger-nails, with the Lawsonia (*Chí-kiah-hwa*) or "finger-dye-flower" of the South. This latter is the proper Henna of Mahommedan and Egyptian harems. Still the same word Henna is probably applied to both plants, as the *Pen Ts‘au* gives under Fung-sien, the synonym 海蒳 (*Hai-nah*), an obvious imitation of Henna. The tender stalks are said to be eaten, and the doubtful assertion is made that insects will not visit this slightly deleterious flower. The seeds are said to injure the teeth and the throat, a property also referred to the root of the Funkia alba. The powdered seeds are mixed with a small quantity of arsenious acid, and applied to bad teeth, when they are readily removed, according to the *Pen Ts‘au*. Dysphagia, and cases of fish or other bones sticking in the throat, are treated with them. The powdered seeds are directed to be taken by "women labouring with child," the "heart of the foot," otherwise the soles of the feet being rubbed at the same time with as many castor-oil beans as the woman numbers in years of age. It is curious to see in these and other instances how the Chinese persist in attaching virtue to worthless substances, with which their shrewd experience has happily taught them to conjoin really active remedies. Every dentist knows that arsenic will corrode, and every pharmacologist is aware that the Castor Oil, whether given in the form of the traditional dose of the lying-in room, or the elegant Liquor Folii Ricini of Mr. Greenish, has some undoubted effect on the system of the puerperal patient. The flower, stalks and root have wonderful sedative, vulnerary, alterative and solvent properties attributed to them, upon purely theoretical grounds. If the four corners of the eye of a sick horse be rubbed with an extract prepared from the entire plant of the white variety, the animal is said to break into a sweat, and immediately recover!

**BAMBOO.**—竹 (*Chuh*).—Two species of Bamboo, the "Friend of China," are described by Burnett, in Murray's China, namely Bambusa arundinacea, and Bambusa spinosa. This graminaceous plant does not flourish in Hupeh, north of the Yangtsze. The south of China is the proper home of the Bamboo, which is replaced on the banks of the Yangtsze by the Arundo phragmites and other reeds, just when the former plant begins to decline. Hunan is the great source of supply for Central China. Some specimens attain a diameter of two or three feet, and a height of some thirty or forty feet. The 斑竹 (*Pan-chuh*), or "spotted bamboo," said to be marked with the tears of Queen Siang, is brought from Nganhwui, Kiangsi, Sech'uen, Hunan, and Hupeh. The Spiny Bamboo 棘竹 (*Kih-chuh*), attains a very large size, and is said to be capable of resisting the attacks of burglars, pirates, &c., when formed into stockades, but is not officinal. Some of the kinds are almost solid-stemmed, and others are fistular. Amongst the former the Coir Bamboo 棕竹 (*Tsung-chuh*), is mentioned, and is used in the manufacture of fans. It is called the 苦竹 (*K'u-chuh*), or "bitter bamboo" in the *Pen Ts'au*. The B. arundinacea is the 蘆竹 (*Lu-chuh*) of the Chinese. Some three or four sorts out of a list of some sixty-one varieties or species enumerated in the *Kwang-kiun-fang-pu*, are used in medicine. The whole subject would form a very interesting and important subject of investigation for the botanist, but it can have little interest for the medical inquirer. The leaves of the 筀竹 (*Kin-chuh*) are said to be tussic, tonic, anthelmintic, stomachic and carminative, and the root, cooling, tonic and alexipharmic. The 淡竹 (*Tan-chuh*) is prescribed in the form of a decoction of the leaves or root, in diseases of the head, chest, &c., supposed to depend upon accumulation of phlegm. A wash of the leaves and root are directed to be used in cases of prolapsus of the womb. Styptic, astringent and antifebrile properties are ascribed to the roots of the various kinds of bamboo, sold under the name of 竹茹 (*Chuh-jü*). Bamboo-juice, 竹瀝 (*Chuh-lih*) prepared by heating short pieces of green bamboo, so as to drive out the sap at the cut ends, is prescribed in catarrh, fever, acute cerebral, spinal and bronchial affections, supposed to depend on wind and phlegm, and as a vulnerary application. Bamboo-sprouts 竹筍 (*Chuh-siun*) are thought to be cooling as a vegetable. They are eaten by suckling mothers to increase the flow of milk, and are sometimes given to children suffering from small-pox, to bring out the eruption. Dr. Waring reports that the Hindoos affirm the emmenagogue properties of the bamboo. No such quality is ascribed by the Chinese to any part of this plant, as they agree that it quiets the uterus. The seeds of the bamboo, and certain morbid excrescences which grow to the size of a hen's egg, called 竹肉 (*Chuh-juh*), on the stalks of the "bitter bamboo," are also enumerated in the pages of the *Pen Ts'au* as having decided properties.

**BAMBOO-RHIZOME.**—萎蕤 (*Wei-jui*), 玉竹 (*Yuh-chuh*).—The root, or rhizome, of what is probably a Leguminous plant resembling the Caragana flava, having narrow leaves and a straight stem like a bamboo, has been referred by Dr. WILLIAMS to a Polygonum, or a Momordica, and by HANBURY, after LOUREIRO, to the Bambusa arundinacea. Several plants, as is customary with Chinese writers, are confounded under this one name of *Wei*, applied to this and other creeping under-ground stems, or rhizomes. The drug sold under the name of *Wei-jui* or *Yuh-chuh*, is in the shape of pale yellow or brown, brittle, semi-translucent, twisted pieces, pretty evenly jointed, and varying a good deal in size, length and hygrometric state. The taste is sweet and mucilaginous, and the odour something like that of newly-baked bread. They are very liable to become mouldy. They open out in water to a full size, as mentioned by that most excellent observer HANBURY. Cooling, demulcent, sedative, tonic, antiperiodic and arthritic qualities are attributed to this rhizome. Washes for the eyes are also concocted from this drug, which resembles liquorice in some of its effects. A drug called 蕤仁 (*Jui-jin*), consists of the small, sculptured stones of one of the plants included under this group. They contain a dried kernel which is used as a laxative and demulcent.

**BAMBOO-SPLINTS.**—竹夾 (*Chuh-kiah*).—Besides mats, bedsteads, cups, measures, cupping-apparatus, scratch-backs, and sundry other articles used in hospitals, which are made out of the Chinese bamboo, very useful splints may be extemporized at a very cheap rate out of the larger pieces. There is said to be a notion current in some parts of the world that the bamboo is poisonous. Spears and arrows, possibly tipped with poison, have been long used in China, but only the galls, or large excrescences already alluded to, have any injurious qualities referred to them. In the *Kwang-kiun-fang-pu* there is an unsupported statement to the effect that the 桂竹 (*Kwei-chuh*), or "Cassia Bamboo," growing in the province of Kwei-chau, at Yun-shan, is injurious, or even fatal to man.

**BANANA.**—甘蕉 (*Kan-tsiáu*), 芭蕉 (*Pa-tsiáu*).—This delicious, wholesome, antiscorbutic fruit of the Musa sapientum is met with in Sech'uen, Fuhkien, Canton and the southern provinces. Several varieties are described in the *Pen Ts'au*. The plant flowers in the Yangtsze provinces, but seldom ripens its fruit. Cooling, pectoral, alterative and antivinous qualities are ascribed to this plant, whose fruit, root, juice, leaves and flowers are all officinal. Dr. WARING and others testify to the great advantage of the leaves as a cool dressing for use, with either oil or water, in the treatment of blistered surfaces, or wounds and sores. The leaf is also the very best extemporaneous shade for inflamed eyes.

**BARKHAUSIA REPENS.**—胡黃連 (*Hu-hwang-lien*).—The dried root of this Composite plant, compared by the Chinese to that of the Justicia, is met with in irregular, tapering, contorted pieces, varying from one to two inches in length, and often as large as a common cedar pencil. The dark brown, or blackish cuticle is scarred, marked with tubercles, and wrinkled or marked very irregularly. The top of the root is likened by LI SHI-CHIN to the bill of a bird, and the cross-section is compared to the eye of the *K'ü-kuh*, a kind of black bird, also called *Pah-ko*, identified by SWINHOE as the Acridotheres cristatellus of ornithologists. This appearance is due to the suspension of eight or more bundles of vascular tissue of a peculiar pale colour, within a cavity surrounded by the darker cortical tissue. The odour is hay-like and the flavour exceedingly bitter. Dust ought to issue from the fractured surface when the drug is genuine, according to the *Pen Tsʻau.* Kansuh and Shensi yield this drug, which is said to have come from Central Asia, as its name indicates. 割孤露澤 (*Koh-ku-lu-tseh*), is given as the *Hu* name of this drug, which is also put down to Persia, the source of *many*, but certainly not quite *all* of the foreign drugs introduced into China by way of the former country. Tonic, astringent, anti-periodic, anti-febrile, alterative and resolvent properties are attributed to this drug, which is very useful in the treatment of that common disease of Chinese children called 疳 (*Kan*), said to depend on the eating of "sweets," as the Chinese character indicates. It resembles the albuminoid infiltration and enlargement of the whole visceral and glandular system of the belly in scrofulous or ricketty children, described by Dr. W. H. Dickinson in a paper read before the Royal Medical and Chirurgical Society, June 22nd, 1869. Remittent or gastric fever of children is no doubt confounded with this disease, of which five kinds are made by Chinese writers. This drug is also used as a wash for the inflamed eyes of children suffering from a special form of ophthalmia which ends in perforation of the cornea and total blindness, in a great number of cases. It is sometimes to be called strumous ophthalmia, or sometimes is connected with the *Kan* disease. It very nearly resembles the "remittent ophthalmia" of Hancock, described in the October number of the Journal of British Ophthalmology, for 1864. Nearly the same treatment has been adopted as there advised. As a sample of Chinese remedies, it may be mentioned that in the treatment of the five kinds of piles, for which *Hu-hwang-lien* is often prescribed, the powdered root is mixed with goose-gall, and applied to the painful or swollen hæmorrhoid.

**Barley.**—麥 (*Meh*).—Several sorts of barley are cultivated in China, but the grain is inferior and consumed only by villagers. Hordeum distichon is the common kind. It is sown in autumn in Central China, and reaped in the third month of the next year. As barley is called the "large corn," and takes precedence in this way, it is also customary to sow the barley some days before the wheat-crop is put in. The name 牟麥 (*Mau-meh*) applied to barley indicates some sort of preference, although wheat is often loosely included in this term. Shensi is said to have supplied China with barley, which was formerly of more importance as a grain, according to Li Shi-chin. The grain as sold in the shops is long, but not so full as the English samples, although much depreciation has probably taken place in the quality by perpetual cropping without any proper rotation of crops. The economic uses of barley as a food for horses, as a source of spirit, and as a nourishing food for man in consideration of its glutinous properties, are all insisted upon in the *Pen Tsʻau.* Cooling, nutrient, peptic, astringent, tonic, demulcent, and other properties, not confirmed at the present time, are referred to barley-meal by the writers quoted in the *Pen Tsʻau.* A change has evidently come over the opinions of the people, for barley is universally allowed to be inferior to wheat. It is prescribed as a tea, with honey and ginger, in urinary affections, and is recommended as a diet for infants unable to take breast-milk. Poultices for abscesses, and washes for eyes into which the beard of wheat or barley may have entered, are directed to be made from the meal.

**Barley-sprouts.**—麥芽 (*Meh-ya*), 麥蘖 (*Meh-nieh*).—Germinated barley, with the radicle attached, is dried in the sun, and much used as a peptic, stomachic, lenitive, demulcent, expectorant, and abortifacient remedy. It is an element in very many prescriptions as an adjuvant, and is much used in puerperal and infantile affections. In the *Kan* disease of children it is decidedly beneficial. It is said to have the power of repressing the secretion of the milk in women whose children have suddenly died after birth.

**BAT.**—蝙蝠 (*Pien-fuh*), 天鼠 (*T‘ien-shü*), 伏翼 (*Fuh-yih*).—This animal is very common in China, being a frequent visitor of foreign houses in quest of mosquitoes, which it devours most satisfactorily. As it is supposed to feed upon the stalactites which are frequently met with in the caves which it is wont to hybernate in, its medicinal properties are rated at considerable value by the Chinese. From its asserted extreme longevity and its excellent sight, this curious creature is credited by the Chinese with the power of conveying these desirable qualities to those who consume the disgusting preparations made from all parts of its body.

**BATS' DUNG.**—夜明砂 (*Yé-ming-sha*), 天鼠屎 (*T‘ien-shü-shi*), 鼠法 (*Shü-fah*). This is a dark brown, coarse powder, looking something like tea-dust, and consisting of debris of the Mylabris insect, dirt, bats' dung, and other extraneous substances. As bats fly by night, the Chinese name this composition, which according to the *Pen Ts‘au* was formerly much better made, "night-bright sand," and apply it to the eyes, as a powder or as a wash, in tinea tarsi, opacities of the cornea, &c. They profess to detect the eyes of the mosquitoes on which the creature feeds in this excrement, which is given internally in ophthalmic affections, otorrhœa, ague, cough, infantile dyspepsia, tabes, offensive perspirations, &c. It is applied, with sugar, to foul ulcers, a practice which the writer strongly recommends, minus the bats' dung. It is curious that here the Chinese seem to have awkwardly imitated the western practice of using cantharides in the treatment of chronic diseases of the eye.

**BDELLIUM.**—假沒藥 (*Kia-muh-yoh*).—This is only another name for an inferior kind of Myrrh, which is imported into China from India, and is itself much adulterated, according to Dr. WILLIAMS. Good Bdellium, according to Dr. WARING, occurs in roundish, dark-red pieces, softer than myrrh and much less agreeable in taste and smell. It might be very advantageously introduced as a substitute for the scarce and costly yet worthless compound sold as *Muh-yoh*, a foreign drug (?) It is said to answer all the purposes of myrrh, and to be an excellent stimulant for just those ill-conditioned ulcers so common in the east. Balsamodendron mukul and B. pubescens are said to yield this drug, which is called *Gúgul* in the Indian Materia Medica.

**BEAD-TREE.**—苦楝樹 (*K‘u-lien-shü*).—See *Melia Azedarach.*

**BEANS.**—豆 (*Tau*).—This character may be written 荳 (*Tau*). It stands for the various kinds of pulse, which form a part of the sixth of the sixteen classes into which all medicinal or natural-historical substances are divided in the *Pen Ts‘au.* The character *Tau* is applied to capsular or baccate fruit by the Chinese, in just the same loose way as the word "bean" is popularly applied to coffee-berries, castor oil seeds, &c. Abrus seeds, cardamon-fruits, nutmegs, &c., are all called *Tau* in Chinese writings. See *Dolichos soja*, *Faba*, *Lablab*, *Lentil*, *Phaseolus*, and *Pisum.*

**BEAN, BITTER.**—胡蘆巴 (*Hu-lú-pa*), 苦豆 (*K‘u-tau*).—These are the small, pale, reddish-brown seeds of a Leguminous plant with small pods, introduced into the southern provinces of China from some foreign country, and understood by Chinese writers to be the seeds of a Brassicaceous plant. The seeds are furrowed and compressed, so as to be somewhat angular in shape, and have a peculiar and somewhat bitter taste. The beans, which have been in use as a medicine since the T'ang time, are usually parched, and given with Lign-aloes, Anise-seeds, and other substances, as a tonic, carminative, arthritic and deobstruent remedy. Renal diseases, hydrocele, hernia and diseases of the hypogastric region are indicated as benefitted by this doubtful drug.

**BEAR-GALL.**—熊膽 (*Hiung-tan*).—The bear is met with in Manchuria, Shensi, Kansuh, and perhaps other provinces. Fung-t'ien fu (Shingking) is said to be a source of the animals which supply the drug-market with sundry articles, which are just of that degree of scarcity which serves to place any very nauseous substance in the very fore-front of Chinese estimation. Mr. Swinhoe reports that one species only of the bear, the Helarctos formosanus, is met with in Formosa. "It is black with a white crescent on the breast, and is allied to the Sun-bear of Japan." Honan, Shansi and Shantung formerly supplied this animal, whose paw, called 熊蹯 (*Hiung-fan*), is a great delicacy, and is supposed to strengthen and harden the constitution. Bear's grease is credited with much the same power of nourishing the hair in China as in the west. Bear-gall is a very expensive substance, sold in the form of a soft, black, sticky bolus, having a bitter aromatic flavour. It is seldom genuine. If it be drawn across a pool of ink, the ink (Chinese) should retreat from the track. Cooling, alterative, astringent, anthelmintic and neurotic properties are supposed to reside in this substance, which is given homœopathically in hepatic and abdominal affections. It is probably useful as a laxative and stomachic to the same extent as Ox-gall.

**BEEF.**—牛肉 (*Niu-juh*).—The cow has a rich variety of names in the Chinese language, and a special designation for it in each year of growth, up to the seventh year. The characters for fish 魚 (*Yü*), and cow 牛 (*Niu*), are said by some to have been somehow exchanged, the four dots of the present character for fish being supposed to represent the four legs of the cow. The creature is said to be deaf in its ears, but to hear with its nose! The "yellow cow" 黃牛 (*Hwang-niu*), and the "water-cow" 水牛 (*Shwui-niu*), or Buffalo as it is called, are the animals usually killed as food. Sundry injurious or retributive effects are said to follow the eating of beef, which is one of the failings of Mahommedan Chinese. These notions are founded on certain humane, or Buddhist ideas. Plenty of good beef is to be bought in Hankow at fourpence perpound. A very good extract of beef is directed to be made by a writer in the *Pen Ts'au*. Beef-tea made with wine and Ginseng, Sophora flavescens, Pachyma cocos, &c., is recommended in all diseases of debility by old physicians. Strong prejudices exist at the present time against the use of these most important agents in the treatment of serious disease. The beef of the "water-cow" is credited with greater tonic and strengthening effects, because of the more sturdy and powerful character of this unwieldy beast. This is but the application of a universal principle in Chinese popular and scientific practice. Watery or dropsical diseases are similarly assumed to be benefitted by the flesh of this inhabitant of pools.

**BEEF-SUET.**—牛脂 (*Niu-chi*).—See *Suet.*

**BEGONIA DISCOLOR.**—春海棠 (*Ch'un-hai-t'ang*).—This ornamental plant is not known to be used medicinally in China. It is worth a trial, as the roots of several Begonias are known to be bitter and astringent and even purgative. The roots of Begonia obliqua, common in Chinese gardens, resemble those of Rhubarb, and are said to be sometimes substituted for them. They are both purgative and astringent, but more frequently the former quality predominates.

**BELEMNITE.**—龍骨 (*Lung-kuh*).—This fossil is met with in Wu-chang fu (Hupeh) and doubtless in many other places in China. The siphuncle is often very distinct. As some small stalactites have a central cavity, they are sometimes confounded with these true fossils. TATARINOV associates Belemnites with those stalactitic masses of carbonate of lime called 鍾乳石 (*Chung-jü-shih*). They are apparently included by Chinese writers with 龍骨 (*Lung-kuh*), or "Dragon's bones," which see. This term *Lung-kuh* is applied to an herb as well.

**BELLADONNA.**—癲茄 (*Tien-kiá*).—This name is given in Dr. WILLIAMS's Tonic Dictionary as applied to the various species of Atropa, but it is doubtful whether the genus is met with in China. The Solanum nigrum is called 天茄子 (*T‘ien-kiá-tsze*), and possibly some confusion has taken place between the two very different characters *T‘ien* and *Tien*. A Solanaceous plant called 坐拏草 (*Tso-na-ts‘au*), with an appended account of a similar drug, called 押不蘆 (*Yah-puh-lu*), is described in the *Pen Ts‘au* as a means of producing profound anæsthesia, during which operations might be performed with perfect freedom from pain. The effects, which are said to last for three days after taking a small quantity of a tincture of the *Yah-puh-lu*, resemble those of the Atropa mandragora. The drug is said to have come from the country of the Huns, or the Uigurs, and it is surmised to have been the drug used by the celebrated surgeon, HWA-T‘O, in certain operations upon wounded intestines.

**BENINCASA CERIFERA.**—白瓜子 (*Peh-kwa-tsze*), 冬瓜子 (*Tung-kwa-tsze*).—This is the Cucurbita pepo of some botanists. See *Tallow-gourd.*

**BENZOIN.**—安息香 (*Ngan-sih-hiang*).—This drug is scarcely obtainable in Hankow, although makers of incense profess to use it. It is exported into Southern China from Borneo and Sumatra, according to Dr. WILLIAMS. 拙貝羅香 (*Chuh-pei-lo-hiang*), is given as its Sanscrit name. The Chinese name is probably derived from 安息 (*Ngan-sih*), the name given to the Parthians, or Persians, whose country, with Annam, Sumatra and Central Asia, is said to have yielded this foreign drug. Dr. WILLIAMS quotes the *Pen Ts‘au*, or the dictionaries, to determine the derivation of the name *Ngan-sih* from the meaning of these two words, ("soothing, reposing"), but Benzoin is not a sedative but a stimulant in its effects as a drug. Very many excellent gum-resins are said to have come to China by way of the Persians. The tree is said to have evergreen, four-cornered leaves, and to resemble the Melia Azedarach. It is said to be disinfectant, deodorizing, carminative, cordial, stimulant, arthritic and sedative. It is prescribed in the *Pen Ts‘au* in vermes, griping pains of the belly, and other diseases of children. It is not much used at the present time, preference being given to the Oil of Benzoin, as it is called. A very curious and amusing test is given for ascertaining the purity of this drug. If genuine, the fumes will charm and collect mice out of their holes! This drug is said to be useful in spermatorrhœa.

**BENZOIN LIQUID.**—安息油 (*Ngan-sih-yú*).—This drug is mentioned in the *Pen*

*Tsʻau* as a treacle-like oil, with all the properties of the gum Benzoin. It is sold in small bottles in the large chemists' shops, but is much adulterated, having much the same dark brown colour as wood-oil, and not so much of the odour of the drug as it should have. Rose-maloes is apparently substituted for it. This is the same drug as that described by Hanbury under the name of 水安息香 (*Shwui-ngan-sih-hiang*). His sample was enclosed in "the pericarp of a fruit, about one and three fourth inches in diameter, closed with wax. Its origin is very obscure. The Chinese assert that they import it from the Indian Archipelago; but I have not been able to trace it either there or in Siam. It is curious, moreover, that this fragrant resin, even to the small globular wooden shell enclosing it, is extremely like that kind of balsam of Peru which was brought to Europe in the capsules of a Lecythis, and naturally supposed to be a product of South America." (See Notes on Chinese Materia Medica, p. 39). See *Oil of Benzoin.*

**BERBERIS LYCIUM.**—枸杞 (*Kau-ki*).—The fruits of this tree are met with as one-celled red berries, mixed with those of other species of barberry. It is sweetish and rough to the taste, and is reputed to be tonic, cooling, demulcent, pectoral, arthritic, and clearing the eye-sight. The fruit is preserved as in Europe, and the young shoots and leaves are made use of as a vegetable, or for infusion as a tea. An oily extract is said to be expressed from this fruit. The root-bark of this tree is sold under the name of 地骨皮 (*Ti-kuh-pʻi*), and is identical with that described by Dr. Waring as the Indian Barberry. It is referred by Tatarinov to a Lycium. It is met with in light yellowish-brown, quilled pieces, having very little taste or smell. It is mixed with the whole roots, and must be perfectly inert as usually kept. The experience of Dr. Waring, who has tried this remedy in the form of tincture, extract and infusion in ague, remittent fevers and the debility following fevers in India, makes it desirable to ascertain how far this drug, carefully prepared, might be a substitute for that expensive article of prescriptions, quinine. A substance described as a bitter crystallizable principle, and called Berberine, has been found in Indian samples. Dr. Stiven believes that Warburg's Drops must have contained this drug, as it produces the same sudorific effects as that nostrum. The Chinese drug comes from Kwei-teh fu (Honan), Si-ngan fu (Shensi), Tai-chau (Kiangsu), and Liang-chau fu, Kan-chau fu, Suh chau, Ngan-si chau, Chin-si ting, and Tih-hwa chau (Kansuh). Anti-febrile, anti-rheumatic, tonic, astringent and vulnerary properties are attributed to this root. A tincture is prepared from both the fruit and the bark as an anti-periodic, or anti-febrile and tonic remedy. The juice of the fruit is directed to be applied to inflamed eyes. An extract of the wood and bark, called in Indian bazaars *Rasot* or *Rusot*, has been found very efficacious by Sir James Y. Simpson and others in Edinburgh and Calcutta, when applied to the region of inflamed eyes, after due admixture with such drugs as opuim, alum and lemon-juice.

**BERBERIS CHINENSIS.**—枸棘 (*Kau-kih*).—This species of Barberry is more spiny than the Berberis Lycium. It and the Berberis aquifolium differ but little from the common species. Some authorities say that they have no medicinal value. They furnish however the drug sold under the names *Kau-ki* and *Ti-kuh-pʻi*, in common with Berberis Lycium.

**BETLE-VINE.**—蒟醬 (*Kü-tsiang*), 土蓽茇 (*Tu-pih-poh*),—This Piperaceous trailing plant is the Chavica Betle of botanists, whose leaves are wrapped round the nuts of the Areca Catechu, giving the name and much of the properties of the compound of several substances called Betle-nut. Sechʻuen and the southern provinces possess this plant, which is of much less consequence in the central and northern parts of China, where the areca-nut is not chewed. The leaves, called 蔞葉 (*Lau-yeh*), are brought from Yuen-kiang chau in Yunnan, and from Kwei-chau fu in Sechʻuen, where they are used as a condiment. The root, about as large as a chopstick, is used with the leaves and fruit, as a warm carminative, stimulant, corrective, prophylactic and odontalgic remedy.

**BETONY.**—藿香 (*Hoh-hiang*).—The Betonica officinalis, or Bishop-wort of old English herbalists, is apparently included under this name of *Hoh-hiang*, which is given to several Labiate plants, including species of Mentha and Lophanthus, besides others. It is curious to note that this remedy is recommended both in the Herbarium of Apuleius and in the *Pen Tsʻau*, as a remedy for the consequences of a drunken debauch. Betony is used in the form of the tops and leaves, as a warm anti-emetic, carminative, and sedative remedy in choleraic affections, irritability of the stomach, and allied disorders.

**BIDENS.**—鬼針草 (*Kwei-chin-tsʻau*).—This Composite plant is included in the list of simples sold by stall-keepers and travelling quacks, and usually called collectively 山藥 (*Shan-yoh*), or "Mountain drugs." These are seldom to be obtained from the regular druggists, and yet they are often useful remedies. The leaves, roots and shoots are crushed, and applied as a popular remedy to the bites of wasps, scorpions, snakes, spiders, &c. It is said to be an unfailing remedy for ingrowing nails. The Chinese appear to be ignorant of the sialogogue properties of this plant, as they merely combine its internal use with its application to bites and stings.

**BIGNONIA.**—紫葳 (*Tsz'-wei*), 凌霄 (*Ling-siau*).—Several species of this climbing plant are met with in China. Its gay dotted flowers are appropriately given to women in puerperal, menstrual, and other diseases tending to deterioration of the blood. The stem and leaves have similar properties and uses. An oil is obtained by distillation from the wood of the Bignonia xylocarpa, a tree inhabiting the forests of India. It is said to be a powerful remedy as an external application in some cutaneous diseases. (See Pharm. of India, p. 150.)

**BIOTA.**—柏松 (*Peh-sung*).—This name is given by Tatarinov to a species of Thuja. It has not been met with in the *Pen Tsʻau*, nor is any drug known by it in the Hankow drug-market. See *Thuja orientalis.*

**BIRDS' NEST.**—燕窠 (*Yen-ko*), 燕窩 (*Yen-wo*).—This is the gelatinous nest of a species of swift or swallow (Collocalia brevirostris), met with in Java, Borneo, Ceylon, and generally throughout the islands of the Indian Archipelago. The bird appears to elaborate the materials of its nest out of certain species of Gelidium, or other seaweeds. Dr. Williams describes them in his Ch. Com. Guide, p. 82, as "externally resembling ill-concocted fibrous isinglass, and of a white colour, inclining to red; their thickness is little more than that of a silver spoon, and their weight from a quarter to half an ounce. When dry, they are brittle and wrinkled; the size is rather larger than a goose-egg; the dry, white, and clean are the most valuable." The best quality is sold in all Chinese druggists' shops, the name 官燕 (*Kwan-yen*) appearing on all their signboards. This expensive article of food for the rich, and physic for the sick, is reputed to be a tonic and invigorating remedy, taking rank after ginseng. Fortunately for the faith which the Chinese put in all rare and curious productions, it is only known to be met with in their own country in Cháng-chau fu, on the sea-coast of Fuhkien. This fancy of the Chinese is of recent date, as apparently no mention is made of the substance in the *Pen Tsʻau*. A substance mentioned in the *Pen Tsʻau* as known since the Sung dynasty, may have been the old representative of the present Birds' nest. It is called 燕蓐草 (*Yen-juh-tsʻau*), and is directed to be used in hæmaturia. See *Swallow*.

**BISTORT.**—拳參 (*Kʻiuen-san*).—A root of a dark colour, spoken of as resembling a man's doubled fist, is brought from Tsí-nan fu (Shantung), and would seem to be a drug of some importance, from the use of the character *San*. It is evidently the root of a Polygonaceous plant, but has not been met with in the Hankow drug-warehouses as yet. It is said to be tonic, astringent and resolvent. The dark root is exhibited in the form of a powder.

**BITUMEN.**—石腦油 (*Shih-lau-yú*).—A black, thick, sulphur-smelling, penetrating, inflammable substance, yielding a thick smoke, which can be used in ink-making, is described in the *Pen Tsʻau* under this heading. Several bituminous substances are included in the narrative, collected from several sources. When first obtained, this substance is said to be a yellow liquid, flowing up out of a water-spring, and then becoming dark, thick and clear like varnish. Hence another name for this petroleum-like substance is 石漆 (*Shih-tsʻih*), or "stone-varnish." It is used to lubricate barrow-wheels and to burn in lamps. It is said to burst into flame in some cases when it is mixed with water. It is used, according to the *Pen Tsʻau* in pill-making. Anthelmintic, expectorant, vulnerary and neurotic properties are attributed to this drug, which is not obtainable at the present time in Hankow. Several places in Yen-ngan fu, in the northern part of Shensi province, Li (or Lu) chau, in the same province, Nan-hiung chau in Canton province, places between Burmah and Yunnan, and places in the southeastern corner of Sechʻuen are all quoted as having formerly yielded these substances, the result of volcanic action upon organic matters. These preparations, if obtainable, would probably be very useful in the scaly eruptions which are so common in Central China, and which are usually lumped together under the word 癬 (*Sien*). In fact they are mentioned in old writings as serviceable in parasitic, scabby, scaly and other intractable diseases of the skin. See *Naphtha*, *Petroleum* and *Rock-oil*.

**BLISTERING-FLY.**—斑蝥 (*Pan-mau*).—See *Mylabris Cichorii.*

**BLOODSTONE.**—代赭石 (*Tái-ché-shih*).—This is a peroxide of iron, or Red Hæmatite, brought from Tái chau (Shansi), after which place it is partly named. Tseh-chau fu in the same province, places in the mineral districts of Shantung, and Nan-hiung chau in Canton province are all said to yield this valuable iron-ore. It is met with in large, heavy, globular concretions, mammillated on the surface, and having a ferruginous, metallic appearance on the fractured face, mixed with dull red oxidized portions. It is also met with in flat pieces, with a scaly fracture, and of a bright red colour, leaving a deep stain on the hands or upon paper.

Specimens coming from Tsí-nan fu (Shantung) are marked 赤石 (*Ch'ih-shih*), and are used as reddle to mark sheep, and as a pigment. This ore is levigated, and made into a confection with honey, or prepared with sour wine as a sort of Vinum Ferri. The use of ferruginous medicines in diseases of the blood was formerly well understood by the Chinese, for 血師 (*Hiueh-sz'*), or "blood-director," is one of the synonyms of this drug given in the *Pen Ts'au*. This is endeavoured to be imitated in the English name chosen for it. It is prescribed as a tonic, blood-alterative, astringent, stomachic, styptic and anti-choreic medicine. The *Kan* disease, as well as infantile ague, is treated with it, and a variety of hypochondriacal or nervous affections supposed to depend upon infernal agency. The *Ch'ih-shih* is noticed in the *Pen Ts'au* as a cordial, tonic, anti-febrile, eye-clearing remedy. So many drugs, including this Bloodstone, are recommended in the treatment of retained placenta, that it is evident this complication of labour is frequent amongst Chinese women. This is confirmed by some years' experience. The number of deaths from hæmorrhage, following the easy birth of the child, as is usual, is very considerable.

**BÖHMERIA.**—苧麻 (*Ch'ü-ma*), 銖麻 (*Chü-ma*).—This hemp-producing plant is the source of the textile fibre called China grass, identical with the Kunkhoora or Rhea of Indian botanists, and perhaps the Caloose of Sumatra. It is cultivated in Chí-chau fu (Nganhwui), in Kwang-sin fu (Kiangsi), Nan-ning fu (Kwangsi), and in Wu-chang fu (Hupeh). The fibres of the stalks are soaked in native soda, beaten and broken up with a rake-like tool, and heated in a dry boiler. The staple, erroneously called *T'sing-ma*, is manufactured into 夏布 (*Hia-pu*), or Grass-cloth, and is mixed with silk in the making of several Canton fabrics. Under the name of *T'sing-ma*, a name properly applied to the fibre of the Sida tiliæfolia, the Shanghai delegates reported the growth of this plant, (Böhmeria nivea, or Urtica tenacissima), in the Sech'uen prefectures of Sui-ting and Yu-yang, and in Yunnan. Three crops are said to be cut in the year. The root, said like the plant itself to be of two kinds, the yellow and the white, is said to be cooling, demulcent, pectoral, diuretic and resolvent. The leaves are reputed to be vulnerary, alterative and astringent.

**BONES OF TIGER.**—虎骨 (*Hu-kuh*), 大蟲 (*Ta-ch'ung*).—The bones of the Tiger, the Leopardus brachyurus, or Muntjak Tiger 獍虎 (*Chang-hu*), and the Lynx are brought from Fung-t'ien fu (Shingking), Formosa, Yunnan, Sech'uen and other places, and sold at considerable prices as an ingredient in certain tonic or invigorating jellies, made of hartshorn and the plastron of the terrapin, with an uncertain quantity of the bones of this strong and courageous quadruped. Many of the provinces of China were anciently inhabited by this animal, which still ranges in the uninhabited portions of Manchuria, such as Kirin and Tsi-tsi-har, and is met with in the Imperial hunting-grounds. It will be observed that the word *Ch'ung*, commonly translated "insect," is applied to this quadruped. This term may in fact be applied to any animal capable of progression in any medium but water. It is reported to be much larger and more yellow than the Bengal species. (W. E. KING, Consular Reports, 1868). This animal is said by Chinese writers to be the king of beasts, and to have very intelligent ways. It is said to eat its victims according to the calendar, and to have the power of planning out the country round its lair, to be visited according to a fixed system. If it leaps up three times at its prey, and fails, it withdraws. Its victims become devils after digestion, but the flesh of the dog is said to intoxicate this cat-like creature. Bad smells, such as burnt horn, are said to scare it away, and the hedgehog, or tenrec, is said to be able to get the better of it. It is believed to become grey at the close of the first five hundred years of its life! An animal spoken of as the *Ts'iu-rh*, is said to be much larger than the ordinary tiger, having a white body with black stripes, and a tail as long as the body. The tibiæ and skull bones are esteemed the best for making the tincture of the much vaunted drug, which is much used in Hankow in rheumatic affections of the joints, diseases of the bones, ague, and general debility. Every other part of the animal is catalogued in the *Pen Ts'au* as having medicinal properties.

**BORAX.**—蓬砂 (*P'ung-sha*), 硼砂 (*P'ang-sha*), 月石 (*Yueh-shih*).—This hydrated biborate of soda is produced naturally on the shores of the lakes of Thibet, where it is collected from the deposit continually being made by evaporation, in much the same way as tincal and hayesine are obtained in other countries. *Sohágá* is the Hindustani name for this same salt, which would become a very important article of trade, in the event of the opening of Thibet by the Indo-Burmese route. It is sold in the partially refined state in broken masses of white, transparent crystals, showing the characteristic oblique rectangular prisms, and on one surface often presenting a layer of large reddish-brown crystals. It is sometimes further refined for use by silversmiths in soldering, as well as in medical practice. It is used to glaze vessels, and as a detergent. Anti-phlogistic, expectorant, resolvent, deobstruent, stomachic, corrective and escharotic properties are attributed to this alkaline remedy. Its properties are perhaps better understood than those of any other drug in the Chinese Materia Medica. It is much used in the thrush of young infants, who seldom escape this disease or its remedy, in the first few days of their existence. It is said to prevent drunkenness following wine, if taken beforehand. It is said to be very useful in cynanche tonsillaris, or similar affections of the throat. When re-dissolved and evaporated in a pan it is called 盆砂 (*Pu'an-sha*), a form which has probably given rise to the synonym *Yueh-shih*, or "moon-stone." A substance called 特蓬殺 (*Teh-p'ung-shah*), brought from Ho hien, in Kwangsi is associated with Borax as a vulnerary remedy. See *Tincal.*

**BORNEO CAMPHOR.**—See *Camphor Baros.*

**BOX-TREE.**—黃楊木 (*Hwang-yang-muh*).—This tree, the Buxus sempervirens of botanists, (Euphorbiaceæ), is in some repute for making combs and printing-blocks. It is very slow in growing, never perhaps reaching the same height as in England. It is one of the few trees which the blundering almanac-makers of China are able to quote as not caring to grow in the intercalary month, which is thrown into the Chinese year, once in three years. The wood which is called Mango-wood in WILLIAMS's Dictionary (1856), is said to be free of the element of fire and therefore on the usual theoretical grounds which seem to have guided the learned LI SHI-CHIN, the leaves are assumed to be cooling. They are prescribed in difficult labours, being supposed to induce expulsive efforts. The ordinary toilet-combs of women, being made of this wood, are often turned to account as a ready domestic remedy. The wood is brought from

Kiung-chau fu, in the island of Hainan, and from Tʻung-jin fu, in Kweichau province, with several other sources.

**BRAN, WHEATEN.**—麥麩 (*Meh-fu*), 麥膚子 (*Meh-fú-tsz'*).—Bran is of very good quality in China, the flour not having been entirely removed by the rough mode of dressing the meal. Nutritive, demulcent, vulnerary and discutient properties are referred to this useful domestic remedy, which is made into poultices, with vinegar, or into a tea for the suppression of severe sweats, bloody urine or any flux. Barley-bran is directed to be substituted for wheaten bran in spring and summer. A pillow stuffed with fresh bran is credited with much the same soothing or cooling, effects in small-pox and other serious diseases of infancy, as the old fashioned hop-pillow. Bran is not much used in feeding cattle, but pigs are sometimes treated with it. It is an article of veterinary medicine and is constantly used in the Wesleyan Mission Hospital, Hankow, mixed with a small proportion of linseed-meal, or ground rice, for making poultices.

**BRANDY.**—燒酒 (*Sháu-tsiú*), 黃酒 (*Hwang-tsiú*).—The Mongol rulers and their followers, the founders of what might be called the Norman dynasty of China, were men of taste. They introduced the plan of distilling wines over again, so as to concentrate their strength and bouquet. This was nothing more or less than the Spiritus vini gallici of the Pharmacopœia. The vicious way of spelling English words with Chinese characters has been applied to this spirit, in such general and dangerous use throughout all Anglo-Chinese colonies and settlements. For those who wish to distinguish, or to disguise this excellent drug by a new name, the second term *Hwang-tsiu* is added, as one in common use amongst native servants. Siam formerly furnished a brandy, flavoured with sandal-wood, which was used in China as a restorative and anthelmintic remedy. Li Shi-chin says that this fluid drank immediately, injures the gall-bladder, ruins the stomach, tends to the production of piles, besides rotting the intestines. See *Brandy-mixture.*

**BRANDY-MIXTURE.**—延命飲 (*Yen-ming-yin*).—This stimulating and "life-prolonging" draught, as the Chinese name here adopted signifies, is an excellent remedy in the treatment of the collapse into which natives suffering from severe dysentery are apt to fall, and quickly die. See *Egg-flip.*

**BRASSICA SINENSIS.**—蕓薹 (*Yun-tai*), 油菜 (*Yú-tsʻai*).—Several kinds of cabbage (Brassica) are grown and eaten on a large scale by the Chinese, as a help to their flavourless rice. 白菜 (*Peh-tsʻai*), is a common kind. A large bleached, bell-shaped kind of cabbage, with a great deal of "heart," is brought from Siang-yang to Hankow, and is largely cultivated and exported by the Shantung people. The genus Sinapis is evidently confounded with Brassica, and Burnett, in Murray's China meets the case with a Sinapis brassicata. Large quantities of this Brassica sinensis are cultivated in the valley of the Yangtsz', to furnish the oil expressed from the seeds. Anti-scorbutic, alterative, arthritic and discutient properties are attributed to this plant, which is included by the Tauists amongst the 五葷 (*Wu-hiun*). 菜薹 (*Tsʻai-tai*) is an excellent vegetable brought to the Hankow markets in winter, or early spring. The thick, tender, leafless, purple stalks are tipped with the partially-opened flowers. The seeds are reputed to be useful in puerperal affections, bloody piles and eruptions upon the skin. See *Cabbage-oil.*

**BREAD.**—蒸餅 (*Ching-ping*), 饅頭 (*Man-tʻu*), 麪包 (*Mien-pau*), 饝饝 (*Mo-mo*).—Much more appears to be known of Trans-himalayan customs and manners by the Chinese than is supposed by most persons, as many habits known to, or practised by the Chinese in former times, in common with Indo-aryan or Turanian races, have dropped out of use and memory. Many words have been coined by those too willing for the task, who might have searched and found out that the Chinese language at least knew of such things. The use of wheaten bread is very ancient, and much more general than is supposed by most persons. Bread-pills are an old remedy with Chinese doctors. Stale bread is looked upon as very digestible. Bread is raised by means of leaven, native soda, or pearlash, the small loaves, or cakes, being steamed in a very simple and ingenious way, described in LOCKHART's "Medical Missionary in China." Honan, which furnishes excellent white flour, Shensi, Shansi and Shantung are provinces where bread and pastry are consumed as the staple article of diet. A kind of fancy bread, shaped like a top, is made in Tʻien-men hien (Hupeh). The Mahommedans are the best confectioners. Chinese bread is very free from alum, and if made from 三道麪 (*San-tau-mien*), is very wholesome. *Mo-mo* is a Honan name for bread. Stale bread is recommended in the *Pen Tsʻau* in diarrhœa, chronic dysentery, leucorrhœa, menorrhagia, profuse sweats, and in serious injuries. Burnt bread is mixed up with oil, and applied to burns and scalds. A remarkable case of one of the Sung monarchs, in his infancy, having been cured of incontinence of urine by the use of stale bread, garlic and beans, is quoted in the *Pen Tsʻau* with approbation.

**BROOM.**—金雀花 (*Kin-tsioh-hwa*).—The flowers of some such species of Leguminosæ as Genista anglica, or some prickly Ulex, is mentioned in the Kwang-kiun-fang-pu, but has not been found in the *Pen Tsʻau.* The papilionaceous flower is aptly compared in this case to a "golden bird" by the Chinese botanist. The leaves are said to be salted and made into a tea, so that the diuretic or purgative properties usually residing in this plant are not availed of.

**BRYONY.**—天花紛 (*Tʻien-hwa-fen*), 白藥 (*Peh-yoh*), 天瓜 (*Tʻien-kwa*).—The root of a species of Bryony, included with Trichosanthes under 栝樓 (*Kwa-lau*), is sold in the shops in irregular pieces of two or three inches in length, and varying in size from the little finger to a man's thumb. Externally they are pale, yellowish white colour, and usually marked with irregular longitudinal striæ, and internally they are hard, amylaceous and white, with yellowish medullary rays passing from the circumference towards the centre. They are very apt to be worm-eaten, when they become reduced to nothing but a very fine, white, dry powder, compared to snow, sometimes called *Tʻien-hwa.* Purgative properties reside in the root, although parts of the plant are apparently edible. Tonic and anti-dysenteric properties are also attributed to the fruit of this and of the Trichosanthes dioica, with which Bryonia dioica, or some other species is confounded. BURNETT, in Murray's China, mentions Bryonia umbellata as met with in the Chinese Flora. This *Tʻien-hwa-fen* plant grows in Sung-kiang fu (Kiangsu), and in Shen chau (Honan), amongst other places.

**BUCKTHORN.**—酸棗 (*Swan-tsau*).—A species of Rhamnus, or "sour date," as the Chinese name signifies, is purgative and deobstruent or peptic. The dried, crushed, red drupes of both Rhamnus and Zizyphus are sold in the shops as 棗皮 (*Tsau-p'i*), and are said to be stomachic and tonic. These fruits are sometimes called 南棗 (*Nan-tsau*) and are brought from Kia-hing fu, and Kin-hwa fu in Chehkiang. The kernels of what is probably the Rhamnus soporifer of botanists, are sold under the name of 酸棗仁 (*Swan-tsau-jin*). They are used as sedatives. The bark of a species of Rhamnus, also brought from Chehkiang, is used in that province (Hang-chau fu), in the manufacture of a beautiful green dye. It is called 綠草 (*Luh-ts'au*) by Dr. WILLIAMS, and is probably the Rhamnus infectorius of botanical works.

**BUCKWHEAT.**—蕎麥 (*K'iau-meh*), 荍麥 (*Suh-meh*).—This important crop of the latter end of the year is much depended upon as a food in the neighbourhood of Hankow. Its elegant white flower marks it to be a Polygonaceous plant, although reckoned by both English and Chinese people to be a cereal, and so called. The small triangular, nutlike fruits of this plant, the Fagopyrum esculentum of the specifying botanists, is very sweet and oily. It makes a very nourishing and digestible food. A good deal of pastry is sold in the streets of Hankow, made from the dark-looking dough of its flour. The crop must be cut before the frost, as the plant is very susceptible. It is recommended as a diet in colic, choleraic diarrhœa, fluxes of all kinds, and abdominal obstructions. It is supposed to affect the growth of the hair, and a poultice of the meal is very efficacious as an application to carbuncles, abscesses, &c. This latter observation can be confirmed from experience. The leaves and other parts of the plant are officinal. Another Polygonaceous plant resembling the Buckwheat, is called 苦蕎麥 (*K'u-k'iau-meh*) or "Bitter Buckwheat," of which nothing is known to the writer.

**BUNGTALAI.**—通大海 (*T'ung-ta-hai*), 大海子 (*Ta-hai-tsz'*), 洋果 (*Yang-kwo*).—The fruits of a Siamese tree, called by the several names of *Boa-tam-paijam*, *Pung-tarai* and *Bungtalai*, have found their way to China, probably by way of Cambodia, where the tree, suspected to be a Nephelium, or Erioglossum (Sapindaceæ), is also met with. The leaves examined by HANBURY, were about five inches long, simple, entire, ovate-acuminate, and glabrous on both surfaces. The fruits are about an inch long, ovoid, and without a pedicle, the cicatrix left by the separation of the dark brown, deeply wrinkled fruit being very conspicuous and curiously oblique, with a kind of spur. The thin dry epidermis being removed, reveals a dry, black mesocarp, within which is the central seed, consisting of the two shrunken cotyledons. When the fruit is put into water for some few hours the thin epidermis peels off, and the dark mesocarp swells up into a very large tasteless mass of gelatine, showing all the wrinkles of the fruit, and imparting a dark tint to the water. This is due to the bassorine contained in the coats of the fruit, conferring the demulcent, lenitive, purgative and nutrient properties possessed by this "opening" fruit, as the Chinese name *T'ung* indicates. The jelly is sweetened and eaten, but its principal use is as a domestic cooling and laxative remedy. It is not met with in Chinese standard medical works, but is said to be used in procuring abortion, along with other drugs. All demulcent medicines are forbidden to pregnant women from the notion that they loosen the fœtus. These fruits are useful in any irritation of the bladder, or urinary organs.

**BUPLEURUM OCTORADIATUM.**—茈胡 (*Tsz'-hu*), 柴胡 (*Ts'ai-hu*).—The rootstock of this Umbelliferous plant is brought from Yen-ngan fu in Shensi, and is met with in the shops in something of the same shape as the *Ts'ien-hu*, or Angelica-root. The tender shoots of this apparently foreign plant are edible. It has little taste or smell, but is said to be anti-phlogistic, derivative, arthritic and deobstruent. It is prescribed in thoracic and abdominal inflammations, in puerperal fevers and in acute diarrhœa.

**BURDOCK.**—蒼耳 (*Ts'ang-rh*).—A species of Arctium is known by this name, more commonly applied to Xanthium strumarium, which see.

**BURNT ALUM.**—枯礬 (*K'u-fan*).—See *Alum.*

**BURNT SPONGE.**—海絨灰 (*Hai-jung-hwui*).—See *Sponge.*

**BUTOMUS UMBELLATUS**—觧草 (*Kiai-tsau*).—This common waterside plant, whose rhizomes were formerly eaten, is officinal in China, in nearly the same cases as it was once in Europe, under the name of Radix Junci Floridi, as a refrigerant, soothing and solvent remedy.

**BUTTER.**—牛奶油 (*Niu-nai-yú*), 酥油 (*Su-yú*).— The first name *Niu-nai-yu* is Anglo-Chinese, and liable to be confounded with the word *Niu-yú* for suet. The name *Su* or *Su-yu* is from the *Pen Ts'au*, where the making of butter from cream, and its sophistication by means of mutton-suet are described. Its foreign origin, and its use with bread, or in pastry are all recorded. The milk of every domesticated aminal in China has been employed for making cream and butter, which are used about Nanking and in the valley of the Yangtsz'. 馬思哥油 (*Ma-sz'-ko-yu*), is given as Tartar name. Ghee is spoken of as 醍醐 (*T'i-hu*). The milk of the wild cow is said to make the best butter. Butter is said to be pectoral, cooling, alterative, tussic, demulcent, laxative and lubricating. It is applied to the stings and bites of various creatures, and was formerly much used as an ingredient in ointments.

**BIRCH.**— 樺木 (*Hwa-muh*), 樺木 (*Hwa-muh*).—The bark of this tree 樺木皮 (*Hwa-muh-pi*), is well known to the Chinese saddlers, shoemakers, cutlers and candle-makers, who turn its tanning or fatty principles to account in their several trades. It was formerly used in the treatment of fevers, jaundice and pulmonary diseases. It is now mainly used as a remedy for application to mammary and other abscesses, to sores, and as a nostrum for deepening the colour of the whiskers and hair. The beard, imperial and moustache of the Chinese being a growth of *paulo-post* middle life is usually not black .The *Pen Ts'au* is full of recipes for hair-dyes. This bark is treated in the same way as many other drugs are directed to be prepared in the *Pen Ts'au*, namely by parching or burning, so as to produce either empyreumatic or cineritious products.

## C

**CABBAGE.**—白菜 (*Peh-ts'ai*).—See *Brassica.*

**CÆSALPINIA SAPPAN.**—蘇木 (*Sú-muh*).—See *Sappan wood.*

**CALADIUM ESCULENTUM.**—芋頭 (*Yú-t'u*)—For this edible plant, sometimes called Colocasia esculenta, See *Taro.*

**CALADIUM XANTHORIZUM.**—鬼臼 (*Kwei-k'iú*), 獨脚蓮 (*Tuh-kioh-lien*).—The round irregular bulb of this Aroid plant is confounded with that of Arum pentaphyllum, and certain Lilial plants. It is said to be deleterious, and to have anthelmintic, alexipharmic, alterative, vulnerary, tussic and ecbolic. It is strongly recommended in difficult labours, and in severe jaundice. For this identification and many others, the writer is indebted to Tatarinov, whose list of drugs was kindly brought to notice by Dr. Williams of Peking.

**CALAMBAC.**—沉香 (*Ch'in-hiang*).—See *Lign-aloes*, and *Tombac.*

**CALAMINE.**—石髓鉛 (*Shih-sui-yuen*).—This is perhaps a kind of Zinc-ore, referred to in the *Pen Ts'au* under the article 自然銅 (*Tsz'-jen-t'ung*), or "native copper." To show the confusion of Chinese writers it is only necessary to point out that this "native copper" is an iron-ore. Still as calamine is sometimes associated with ores of iron, some substitution may have taken place, as brass is said to have been formerly produced from some such a red, unctuous brittle ore. The properties referred to in the *Pen Ts'au* agree with those referred to preparations of Zinc. See *Zinc-bloom.*

**CALAMUS DRACO.**—渴留 (*K'oh-liu*).—It is probable that this tree is not the only source of the "dragon's blood," or "dragon's spittle gum," which is confounded with Gum-lac, yielded by another Leguminous tree, the Erythrina monosperma of botanists, called 渴禀 (*K'oh-lin*), in the *Pen Ts'au.* 土藤 (*T'u-t'ang*), is probably a name of this species of rattan said to yield the Sumatran variety, exported to China. See *Dragon's blood.*

**CALCAREOUS SPAR.**—凝水石 (*Ying-shwui-shih*), 白水石 (*Peh-shwui-shih*).—This mineral, which should be a pure carbonate of lime is assumed in the *Pen Ts'au*, which treats every substance in a medical point of view, to be useful as a cooling, anti-phlogistic and diuretic drug. It is sometimes called 寒水石 (*Han-shwui-shih*), and is sold in easily-broken, irregular, or stratified masses of pure crystals, or sometimes tinged with a rufous colour. It comes from T'ung-chau fu (Shensi), and Fen-chau fu (Shansi), and is sometimes confounded with gypsum. Like the latter, it is sometimes used to adulterate calomel, which is often very dear. It is deflagrated, ground into a powder, and sprinkled upon burns and scalds, and applied to aching teeth, or bleeding gums. All these mineral substances are little used at the present time, and are seldom kept in stock by druggists.

**CALCINED SHELLS.**—撲粉 (*P'oh-fen*), 海蛤粉 (*Hai-koh-fen*).—Marine, lacustrine, and riverine bivalve molluscs, or shell-fish, are all used to make an absorbent, dusting, or face-powder in daily use by Chinese women, and often turned to account as a domestic application to sores and eruptions, so common in semi-tropical climates. The Chinese are very skilful in levigating and scenting these powders. All sorts of ingenious puffing names are given to the fabrications of shops specially devoted to these toilet articles. The second name although referring to marine molluscs, covers all sorts. Calcined shells collected off the coast of Shantung are powdered and given as remedies in fevers, apoplexy and bloody fluxes.

**CALOMEL.**—水銀粉 (*Shwui-yin-fen*), 汞粉 (*Hung-fen*), 輕粉 (*K'ing-fen*).—This "mercurial powder" is made in large quantities in Hankow in much the same way as Mr. Pearson gives on page 59 of the third volume of Sir J. Davis's work on "The Chinese." Common salt (one ounce), mercury (one ounce), and alum (two ounces); or salt, mercury, sulphate of iron, and saltpetre in some such proportions, are rubbed together and put into an iron platter, which is covered over with a roomy earthen dish, well luted down. This is exposed to the heat of a strong charcoal fire for four or five hours, when water is thrown upon the upper pan, and the removal shows the calomel condensed in the form of a beautiful feathery, white, crystallized sublimate upon the inner surface of the upper dish. It is the delicate appearance of this sublimate which induces the Chinese to call it "light powder" or *K'ing-fen*, in spite of its known weight. One ounce of mercury is said to yield eight-tenths of an ounce of calomel. The drug is put up in paper, and packed in small chip boxes, containing about a (Chinese) ounce. The crystals are flat, brilliant, white, clear, bipinnate, and sometimes acicular. Fifty grains of a sample which was adulterated, as Hanbury has pointed out, with isomorphous selenite, or sulphate of lime, were volatilized by heat, but left twenty grains of the latter salt, which the acute Chinese have found to be of exactly the same specific gravity and crystalline appearance as the expensive mercurial preparation. Shensi, Shansi and Nganhwui have manufactories of this salt. It is sometimes confounded with an unctuous, aluminous earth, used to 'anoint new-born children, and hence calomel is sometimes called 膩粉 (*Ni-fen*), not *Ni* or *I'-king-fen*, as it is called in Cleyer's *Specimen Medicinæ*, where it is said to be a native mineral. This preparation is directed to be purified by careful sublimation, when a purer and stronger chloride is obtained, called 粉霜 (*Fen-shwang*). This is not known in Hankow, but is mentioned in the *Pen Ts'au*, and may be the *sublimate* said to be purchased by the Mongols of the Russians, as the Chinese name signifies "calomel-sublimate." There are some eight or nine manufacturers in Hankow, and the price varies from sixpence to a shilling per ounce. The Chinese will not purchase the foreign hydro-sublimated calomel which is in a powder, and is regarded by them as sophisticated. The same persons make corrosive sublimate, nitric oxide and other preparations of mercury, often chemically impure, having lead, baryta and other metallic substances in their composition. These latter are added to counteract or assist the effects of the primary drug, mercury. Purgative, alterative, anti-syphilitic, anti-scorbutic, sialagogue, expectorant and deobstruent properties are referred to this drug, which is very largely used in Chinese medical and surgical practice. It is used externally as a dusting powder to sores, and as an ointment in syphilitic and chronic ulcers. Its use in infantile syphilis, and in disorders of the belly in children is very well understood.

**CALYSTEGIA SEPIUM.**—旋花 (*Siuen-hwa*)—The roots of this large and beautiful member of the order of Convolvulaceous plants are said to be boiled and eaten by the Chinese, who manage to cook and digest almost every root or tuber in spite of the warnings of the bo-

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tanists and chemists. It is probable that the Convolvulus Batatas is confounded with this plant, which is agreed by all writers on botany to resemble scammony in its action. Shansi, Shensi and Honan produce this plant. Tonic, nutrient, demulcent and diuretic properties are attributed to the root, which is also said to have the power of cementing broken bones and tendons, if diligently applied as a poultice!

**CAMPANULA.**—方黨參 (*Fang-t‘ang-san*).—This is a drug met with in bundles of long tapering, angular pieces of a dirty brown colour, marked with wrinkles and fissures, or transverse rings. They average about a foot in length, and are more or less tough or brittle, according to age. There are remnants of the radicles at the thicker, or lower ends. The cross-section is of a lighter colour, showing the same open, plicated arrangement of the woody tissue as the adenophora, with the addition of a firmer central pith, of a yellow colour. The two drugs resemble each other a good deal, but the Campanula is much larger and darker, and is marked externally with dark patches of the dried juice, common to these Campanulaceæ. It has a sweet mucilaginous taste, and is used as a tonic like ginseng. It is used in syphilis, just as the Campanula glauca is amongst the Japanese. It is named after a variety of ginseng, and is grown in Hupeh. See *Ginseng*, *Bastard.*

**CAMPHOR.**—樟腦 (*Chang-nau*), 韶腦 (*Shau-nau*).—This native drug, an important export article of commerce in the South of China, is the product of the Camphora Officinarum, a tree growing abundantly in Fuhkien, Canton, Formosa and Japan, and met with as a timber-tree in Kiangsi, Hupeh and other provinces to some extent. It is named after the places which yield it largely, namely 漳州府 (*Chang-chau fu*), in Fuhkien, and 韶州府 (*Shau-chau fu*), in Canton province. Cháu-chau fu in the latter province also yields it. The drug is very impure, having been carelessly prepared by subliming the chipped wood of both the root, trunk and branches, after soaking in cold water. The *Pen Ts‘au* gives directions for subliming it into copper vessels, when it is called 片腦 (*P‘ien-nau*). The Chinese give little trouble to this further purification, but the Japanese are said by Dr. WILLIAMS to turn out better samples of this drug. It is met with in granular lumps or grains, of the colour of dirty snow, and having a strong terebinthinate odour, and a warm, bitter aromatic taste, with an after-taste somewhat cooling. It is not so strong as the English drug, but it is more volatile. Very good camphor is brought from Tsiuen-chau fu, in Fuhkien, and the Formosan camphor might be brought forward in any quantity if British interests in Formosa were adequately protected. This drug is reputed to be a warm, stimulating, diaphoretic, carminative, sedative, anthelmintic and arthritic remedy. It is compared to nitre in its nature and is an ingredient in certain fireworks. It is used to deodorize, is applied to aching teeth, and is often put into boots and shoes to keep out the damp. The Chinese say that if camphor be put upon clothes it makes them liable to tear, although it undoubtedly to some extent preserves the articles from the attacks of insects. The powdered drug, mixed with the powdered leaves of the Xanthoxylum piperitum, is applied to the porrigo decalvans of children.

**CAMPHOR, BORNEO.**—龍腦香 (*Lung-nau-hiang*). 氷片 (*Ping-p‘ien*). 梅花片 (*Mei-hwa-p‘ien*). 羯婆羅香 *Hoh-p‘o-lo-hiang*). 婆律香 *P‘o-luh-hiang*).—This substance called "dragon's brain gum," or "icicle-flakes" is said to come from Chang chau fu, in Fuhkien, and the tree yielding it, the Dryobalanops Camphora, is described as growing in Canton province. The present supply comes to China from the west coast of Sumatra, and is named after Baros or Baroos, a port of shipment of this ridiculously valuable solid oil. The tree (Dipterocarpaceæ) is straight, with a tall stem sometimes twenty feet thick, overtopping with its huge crown other large trees to the extent of some scores of feet. The natives describe three kinds of this camphor-tree, named the *Mailangnan*, *Markin tungan*, and the *Markin targan*, all distinguished by the mere colour of their bark. The dark green, oval, pointed leaves are tough and camphoraceous. The acorn-like fruit compared by the Chinese to that of the cardamom, is eaten as a relish, or as a sweetmeat by the natives. The trees are cut down in April or May, whilst fruiting, and the whole of the immense trunk is split up, and sacrificed to find the grains or flat pieces of crystallized camphor, the largest of which rarely exceeds half an inch across. These are met with, if at all, in crevices or cells in the body of the tree, and more frequently in the swellings of the branches, as they issue from the trunk. One tree may yield as much as half a pound. It is met with in Hankow in crystallized, reddish-white grains, which on closer inspection are seen to be mixed with particles of a purer white colour. Large colourless crystals are never met with here. HANBURY says that it "has the odour of common camphor mixed with something like that of patchouli. It is less volatile than laurel camphor, and has a greater specific gravity." Chinese samples have a very penetrating odour, rather pungent or aromatic, and the drug is very easily dissipated at the ordinary temperature of the air. A common Chinese test is to put a small portion on the cornea, when it immediately and entirely evaporates, if pure. The crystals are said in FOWNES (1868) to be hexagonal prisms, and the substance to be very soluble in alcohol and ether, but insoluble in water. It melts at 198°, "and boils at 212°." Its composition is $C_{10}H_{18}O$, common camphor being $C_{10}H_{16}O$. Borneo, Cochin-china, Persia, Sumatra (Fuh-shi kwoh), and a country in South India, called *Mah-lo-tan-ch‘ih* are said to yield this drug, often as so-called tribute. 米腦 (*Mi-nau*), 速腦 (*Suh-nau*, and 金脚腦 (*Kin-kioh-nau*), are mentioned in the *Pen Ts‘au* as names of varieties of this drug, brought from the Indian Archipelago. 清冰片 (*Ts‘ing-p‘ing-p‘ien*), and 坭冰片 (*Ni-p‘ing-p‘ien*), are names for the clean or Malay sort, and the brownish inferior kind, brought to the Chinese market, given by Dr. WILLIAMS. 片腦 (*Pien-nau*), is more properly applied to the Borneo camphor. 冰片腦 (*P‘ing-p‘ien-nau*), and 蒼龍腦 (*Ts‘ang-lung-nau*), are other names of this drug, the latter standing for a very pure greyish crystalline variety, said to be much stronger than any of the other sorts. This drug is now considered to be poisonous, and is little used as an internal remedy. It is used by persons attempting suicide, but it is doubtful whether it would destroy life in a healthy person, setting aside its high price, often equal to its own weight of silver. The *Pen Ts‘au* credits it with diaphoretic, sedative, stimulant, antispasmodic, arthritic, anthelmintic and escharotic properties. It is now applied as a powder to chancres, buboes, carbuncles and eczematous sores. It enters into the composition of the better class of dusting-powder, so agreeable in prickly heat and other eruptions. It is also applied to opacities of the cornea, polypus of the nose, ranula, fistulæ, and to any disease affecting the five senses, or any of the apertures or outlets of the body. Much of the recommendation is merely theoretical. Those uses are at least more sensible than the practice of the petty chiefs of Sumatra, who are said to embalm their dead with the costly medicament. See *Oil of Camphor.*

**CANARIUM.**—橄欖 (*Kan-lan*), 青果 (*Tsʻing-kwo*).—The Amyridaceous tree yielding the "green fruit," known by the name of the Chinese Olive, is said to resemble the Sapindus Chinensis or Soap-tree. It is grown in Fuhchau fu and Tsiuen chau fu, in Fuhkien, and in Nan-ning fu, (Kwangsi), as well as in other parts of the two Kwang provinces. The tree is more than ten feet high, and yields good timber. The oblong, pointed fruits, sold in the streets are the products of two or three varieties of Canarium Pimela, distinguished by the *Pen Tsʻau* as 緑欖 (*Luh-lan*) Pimela alba of botanists, and 烏欖 (*Wu-lan*), Pimela nigrum, or Canarium Pimela, with other distinctions. The fruits are either green, or shrivelled, being often preserved in salt or added to wine, to medicate it, or to counteract its effects. They vary from one inch and a quarter to one inch and a half in length. When the pulp of the drupe is removed there remains the large, dark, pointed, polygonal, or triangular stones 核 (*Heh*), having three apertures at the upper end, where they often show a tendency to split into three portions, disclosing the three-celled interior. These hard stones are often beautifully carved into beads at Amoy and other places. The fruits are said to be stomachic, sialagogue, antiphlogistic, alexipharmic, anti-vinous and astringent. The kernels are said to have the power of dissolving fishbones accidentally swallowed, as fish are said to be poisoned by the wood of the tree. A kind of gum, resembling Black Dammar, called 欖糖 (*Lan-tʻang*), used to caulk ships, is obtained from the branches and bark or leaves of this tree, but has no medicinal use, so far as known. See *Elemi.*

**CANNABIS CHINENSIS.**—火麻 (*Ho-ma*), 大麻 (*Ta-ma*), 亞麻 (*Ya-ma*), 黃麻 (*Hwang-ma*).—These and other names are applied to a medley of Urticaceous, Malvaceous and Tiliaceous plants, all having hemp-like fibres, and some medicinal properties. See *Corchorus, Hibiscus cannabinus, Linum usitatissimum, Hemp* and *Sida.*

**CANNABIS INDICA.**—麻藥 (*Ma-yoh*).—This is an identification of TATARINOV's, but no such name has been met with in Chinese works, nor has any drug been met with having this name. See *Chloroform.*

**CAPOOR CUTCHERY.**—山奈 (*Shan-nai*), 山辣 (*Shan-lah*), 三奈 (*San-nai*), 三賴 (*San-lai*).—This word is a corruption of the Hindustani name *Kápúr Kachri*, under which the fragrant aromatic roots of the Hedychium spicatum, and perhaps of the Alpinia Chinensis, are sold in the Indian bazaars. See *Kæmpferia galanga.*

**CAPRIFOLIUM CHINENSE.**—金銀花 (*Kin-yin-hwa*).—The fragrant "gold and silver" flowers of this climbing plant are included under the Lonicera, and have the same medicinal properties and uses. See *Lonicera xylosteum* and *Honeysuckle.*

**CAPSICUM.**—大胡椒 (*Ta-hu-tsiau*), 辣椒 (*Lah-tsiau*).—The small, pointed, conical fruit of C. fastigiatum, and the larger green, or red fruits of C. annuum, C. baccatum and other species of this Solanaceous plant are met with in Central China. BURNETT enumerates

Capsicum Sinense, and C. frutescens in addition. They are largely cultivated and eaten in Hupeh, Hunan, Sechʻuen, Shensi, Shansi and other provinces, but there is no special mention made of these acrid, stimulant fruits in the *Pen Tsʻau.* They are eaten at all times of the year in the green, red and dried states. If they are deprived of their seeds they do not purge. Shansi people are very fond of them, and they make a sort of cayenne pepper of the dried berries. They are used to produce diaphoresis, or derivation.

**CARAGANA FLAVA.**—黃精 (*Hwang-tsing*).—The root of this Leguminous plant is met with in flat pieces, from one to two and a quarter inches long, having a greenish-yellow colour, with a varying degree of translucency and flexibility. The outer surface is marked with small circular cicatrices, tubercles, or transverse lines. The inner surface is paler, and shows signs of having been attached to the root. The taste is sweetish and mucilaginous, and would seem to justify its consumption as a food in times of scarcity, as mentioned in the *Pen Tsʻau.* The drug commonly called Bamboo-rhizome is allied to this plant, which is fabled to confer longevity. The drug-market is supplied from Chú-chau (Ngan-hwui), Hang-chau fu (Che-kiang), and Chang-teh fu (Hunan). The identification is taken from the list of TATARINOV, who was assisted by Prof. HORANINOW of St. Petersburgh. Tonic, demulcent, arthritic, lenitive and prophylactic properties are ascribed to this medicine, which is also advised to be taken in confirmed leprosy.

**CARAWAY.**—西茴香 (*Si-hwui-hiang*).—This name of "western fennel" is coined, as the Chinese do not clearly distinguish the Caraway from other Umbelliferous fruits, if they have it at all. See *Coriander*, and *Fennel.*

**CARBONATE OF LIME.**—光粉 (*Kwang-fen*).—This drug "lustrous powder," is white marble broken, ground and levigated. It may be used in the same way as the Precipitated Carbonate of Lime of the late Dublin Pharmacopœia. Calcareous spar and Stalactite are nearly pure varieties of this salt. See *Marble.*

**CARDAMON.**—豆蔻 (*Tau-kʻau*).—See *Amomum.*

**CARDUUS.**—刺薊 (*Tsʻz'-ki*).—TATARINOV suggests 續斷 (*Shuh-tan*), 小薊 (*Siau-ki*), and 大薊 (*Ta-ki*) as names of various species or varieties of Carduus. See *Cirsium.*

**CAREX HIRTA.**—莎草 (*Sha-tʻsau*).—This sedge is described in the *Pen Tsʻau,* but is not carefully separated from the Cyperus esculentus, which see.

**CARRAGEEN MOSS.**—石花菜 (*Shih-hwa-tsʻai*).—Sphærococcus cartilaginaceus, var. setaceus, met with in the Chinese market, and used as a substitute for the more expensive birds' nest, differs but little from the Carrageen or Irish moss. Cooling properties are attributed to all these sea-weeds, or lichens as they are more properly called in some cases

**CARROT.**—胡蘿蔔 (*Hu-lo-pʻeh*), 紅蘿蔔 (*Hung-lo-pʻeh*).—This excellent root was brought to China from Central Asia during the Mongol rule. It grows wild, the hispid fruit forming the basis of the vermilion-pad used by the Chinese as their ordinary red pigment for stamping purposes. A Shansi variety is said to be of very large size. It is reputed to be very digestible, nourishing, lenitive and tonic. The natives eat it with wild duck. The seeds are recommeded in chronic diarrhœa. The name *Hung-lo-pʻeh,* more commonly used by the Chinese is more correctly applied to the red variety of the radish (Raphanus sativus).

**CARRON OIL.**—湯火油 (*Tʻang-ho-yü*).—A preparation of lime and oil, without the addition of water, is described in the *Pen Tsʻau.* An emulsion of Rice-congee and sesamum, or linseed oil is generally applied. Urine, stale or fresh, honey, wood-oil, sugar and water, the juices of the earth worm and the extract of the opium-poppy are all used in cases of severe burns or scalds.

**CARYOPHYLLUS AROMATICUS.**—丁香 (*Ting-hiang*).—See *Cloves.*

**CASSIA-BARK.**—桂皮 (*Kwei-pʻi*), 肉桂 (*Juh-kwei*).—This drug, the product of Cinnamomum aromaticum, or C. Cassia, C. iners, and perhaps other species or varieties of the genus Cinnamomum, is the Cassia lignea, or Chinese cinnamon, largely exported from the south of China to Europe and America. The bark is not decorticated as met with in Hankow, its thickness being a measure of its value with the Chinese. There is no real distinction into the kinds expressed by the English words Cassia and Cinnamon. The thickest barks are called 肉桂 (*Juh-kwei*), a name taken by Dr. WILLIAMS to stand for Cinnamon, and placed by him amongst the imports. The only kinds of imported bark brought here are simply thick, whole barks brought from Annam, or Cochin-china. The only samples known to approach the thin liber of English quilled Cinnamon proper seem to be alluded to in the *Pen Tsʻau* as coming from Shau-chau fu (Canton), but not known in Hankow. It is called 箘桂 (*Kwʻan-kwei*), or 筒桂 (*Tʻung-kwei*). The 桂心 (*Kwei-sin*), or "Cassia-buds" of TATARINOV, is a kind of decorticated Cassia-bark, prepared for medicinal use as is usual, by rasping away the epidermis. Cassia-bark is met with in half-quills of a foot in length, half an inch in diameter, and one-twelfth of an inch in thickness. It is darker, closer in the grain, thinner and much less pungent than the *Juh-kwei* or "fleshy cassia," the Cinnamon of Dr. WILLIAMS. The latter is met with in close, perfect quills, of the same length as the *Kwei-pʻi,* but much stouter and thicker. The texture is more open, of a lighter colour, and the inner surface is more distinctly striated. The external surface, like that of the *Kwei-pʻi,* is variegated with lichenous patches. The taste is exceedingly pungent and spicy. The price is four times greater than that of the "skinny cassia," for this is the literal meaning of *Kwei-pʻi.* The great market for these Cassias and Cinnamons is at Tai-wu in Pʻing-nan hien (Sin-chau fu), in Kwangsi province, a few miles to the south of the district city, visited by Mr. Moss. A long-leaved tree resembling the Eriobotrya Japonica, the leaves being dentate, hairy, and coriaceous, and the flowers white, is called the 牡桂 (*Mau-kwei*), or Moutan Cassia. This is also called 丹桂 (*Tan-kwei*), and supplies some of the Cassia brought from Pʻing-yueh chau in Kwei chau. 猺桂 (*Yau-kwei*), is a kind of Cassia or Cinnamon named after the 猺 (*Yau*), or 獞猺 (*Tʻung-yau*), a tribe of Miau-tsz' in Li-po hien, in the south of the province of Kweichau. 木樨桂 (*Muh-si-kwei*), is the name of a kind of Cassia named after the Olea fragrans. 安邊桂 (*Ngan-pien-kwei*), is a highly valued kind of Cassia brought from Annam. 交趾桂 (*Kiau-chi-kwei*), is a common name on druggist's signboards. Cassia is often used more as a condiment than as a medicine by the Chinese, who eat it with pork and meat in general. Stomachic, stimulant, carminative, astringent, sedative and tonic qualities are attributed to this drug in its thicker and more aromatic varieties *Juh-kwei*, or *Kwei-sin*. The compound powder of cinnamon is an excellent remedy in the water-brash of Chinese dyspeptic patients, and with a small quantity of opium is one of the best things that can be given to an opium-smoker endeavouring to give up the habit. Some action is ascribed in Chinese works to cinnamon as affecting the uterus, a property which is usefully turned to account in the treatment of menorrhagia, a very common disease in China. See *Cinnamon*.

**CASSIA-BUDS.**—月桂子 (*Yueh-kwei-tsz'*).—The immature flowers of Cinnamomum Malabathrum and of Cinnamomum aromaticum have been long collected in Kiangnan, Cheh-kiang and Kwangsi as a spice, or a drug. They are packed with the bark and exported to India and Europe. They are used in India in diarrhœa, dysentery, and coughs, and have all the properties of the Cinnamon or Cassia. The *Pen Ts'au* merely recommends them in certain eczematous affections behind the ear, called "moon-sores," and supposed to be produced by lunar influences. See *Cinnamomum Tamala.*

**CASSIA-LEAVES.**—桂葉 (*Kwei-yeh*).—The leaves of several species of Cinnamomum such as C. nitidum, C. iners, C. Tamala, &c., were formerly exported to India and to Europe, under the names of Folia Malabathri (or Tamalpathri), or Indian leaf. They were in much repute amongst the ancients as sudorific and stomachic remedies. They partake of the aromatic properties of the genus Cinnamomum, and with the twigs are said by Dr. WILLIAMS to be used in the distillation of an oil, resembling that of cloves, and called Oleum Malabathri, or Oleum Cinnamomi foliorum. China and Ceylon both supply this oil. The Chinese are generally aware of the presence of this oil, for they bruise the leaves of the Cinnamon tree and use them to wash their long jet-black hair, along with warm water.

**CASSIA-TWIGS.**—桂枝 (*Kwei-chi*).— Dr. WILLIAMS describes these as "the extreme and tender ends of the branches" of the cassia-tree, such as are used in distilling oil at Canton. The *Kwei-chi* of the *Pen Ts'au* would exactly answer to the Ceylon Cinnamon of commerce, being the thin bark of the smaller branches of the tree, sometimes called 柳桂 (*Liú-kwei*). The samples in the Hankow drug-market are just the small twigs and branches cut transversely into fine slices, having very little of the flavour of cassia. The tree yielding them is called the 木桂 (*Muh-kwei*), or 牡桂 (*Mau-kwei*). They are given in coughs to relieve the dyspnœa, in colds to promote perspiration, and in other diseases as a derivative to the exterior.

**CASSIA FISTULA.**—長果子樹 (*Chang-kwo-tsz'-shü*).—The long, cylindrical, dark pods of this Leguminous tree are collected by the Chinese in Kwangsi, for the sake of their purgative pulp and seeds. Dr. WILLIAMS gives 槐花青 (*Hwai-hwa-ts'ing*) as the name of the fruit which is exported. He describes the pulp as "reddish and sweet, and not so drastic as the American sort; if gathered before the seeds are ripe, its taste is somewhat sharp." The drug is unknown in Central China, and has not been met with in the pages of the *Pen Ts'au*. WARING, in the Pharmacopœia of India, quotes Dr. IRVINE as stating that the root of this tree acts as a very strong purgative.

**CASSIA SOPHORA.**—槐 (*Hwai*).—See *Sophora Japonica.*

**CASSIA TORA.**—決明 (*Kiueh-ming*), 草決明 (*Ts'au-kiueh-ming*).—The seeds of this Leguminous tree are, as the Chinese name indicates, used in the treatment of diseases of the eye. The provinces of Shensi, Kansuh, Hunan and Hupeh yield this plant, which manifests some of the irritability possessed by the Mimosa. The long, reddish pods contain very many dark brown, shining seeds 決明子 (*Kiueh-ming-tsz'*), of an irregularly compressed, cylindrical shape, about three lines in length, and marked with two light stripes on opposite sides. They are pointed at one end, and truncated, or rounded at the other, and have a bitterish, mucilaginous taste. Their great use is as an internal and external remedy in sore eyes of all kinds, or as an application to herpetic or furunculoid sores. The leaves of this plant are said by Indian surgeons to be an excellent substitute for senna. AINSLIE in his Mat. Indica, states that the leaves of C. tora, rubbed up with lime-juice, are regarded by the Hindu doctors as one of their best remedies in ringworm. The seeds of Cassia auriculata used in India as a remedy for sore eyes, and of Cassia Absus, are used in China under the name of 茳芒 (*Kiang-mang*), and are sometimes met with in samples of the Cassia tora seeds. The Cassia auriculata is eaten as a vegetable, there being none of the bitterness, but more of the gummy qualities of the C. tora in it. It is curious that in China as in India a spirituous liquor, and a leaven are made of this plant, with the addition of some saccharine or starchy ingredient. Some confusion exists between these plants and certain species of Celosia, which see.

**CASTOR.**—膃肭臍 (*Wuh-nuh-tsi*).—The peculiar secretion of the two follicles, connected together by a duct, has been long known to the Chinese. They describe it as of a brownish colour, something like musk. It is made into pills, or a tincture, given in debility, seminal weakness and nervous diseases. It is not known in Hankow. The beaver, variously called 膃肭獸 (*Wuh-nuh-shau*), 海狗 (*Hai-kau*), and 水烏龍 (*Shwui-wu-lung*), is said to have formerly existed in Shantung and Shingking. Sumatra supplied it to China, and Arabian envoys brought it as tribute in the Sung period.

**CASTILE SOAP**—蠟鹼 (*Lah-kien*).—This name is given on the authority of Dr. WILLIAMS. The Chinese would appear to consider it a soap made from wax, judging from the name. The Chinese word 肥皂 (*Fei-tsau*) as it indicates a fatty material (*fei*), and sulphate of iron (*tsau*), would make a very good word for mottled soap, which contains sulphate of iron.

**CASTOR-OIL PLANT.**—蓖麻 (*P'i-ma*).—This suffruticose Euphorbiaceous plant is grown in Hupeh as a shelter from the sun. This fact lends considerable probability to the belief that the gourd of Jonah was this plant, which attains a considerable height, and is self-sown in tropical climates. It has been or is known in all parts of the world. The Saxons were acquainted with it, and in their translation of the Herbarium of Apuleius, a favorite book with them, it is said that this "wort smootheth every tempest." It grows to the height of more than ten feet, and forms a woody stem, which never survives the winter of Central China. There is a red-stemmed, and a white-stemmed variety, but the former is the most common near Hankow. The tricoccous spiny fruit contains the seeds, one in each cell, compared to, and named after a species of louse 螕 (*Huen*), which infests cows in China. A species or variety of Ricinus is said to have smooth fruit, and to be innocuous. It must have been from some such Euphorbiaceous plant that a Castor-oil is said to be obtanied by the Chinese, and used in cooking food. The plant is said to be of foreign origin, and such an admission on the part of the Chinese is always to be depended upon. The leaves are applied to swellings as a discutient remedy, and are given internally as a tussic and expectorant dose. Nothing is said of the decided galactagogue properties of the leaves of this plant. For this purpose Dr. Waring directs that a decoction, or the expressed juice, be administered internally, and that fomentations with the decoction, together with poultices of boiled leaves, be applied locally to the breasts. The want of breast-milk is said to be a very frequent occurrence amongst foreign mothers in China, and this remedy is well worth trial, as it is generally at hand. Dr. Shortt reports having successfully used the warmed leaves, simply applied to the breasts. There is a plant called 博洛廻 (*Poh-loh-hwui*), appended to the notice of the Castor-oil plant in the *Pen Ts‘au*, and said to resemble it.

**CASTOR-OIL SEEDS.**—萞麻子 (*P‘i-ma-tsz’*)—These oval, slightly curved or compressed seeds, are grey, shining, and striped or mottled with blackish or reddish-brown stripes or spots upon the outside. They vary from four to five lines in length, are three lines in breadth, and are marked with a ridge running down the inner or under surface from the larger end to the prominent hilum. On breaking the hard and brittle seed-coat, the oily albumen is seen to be covered with a delicate white membrane. The mass of albumen and cotyledons is easily crushed, yielding the acrid purgative oil, upon which their properties depend. The crushed seeds are used in Chinese medicine as an outward application in a large number of diseases, combined with the oil of the seeds, or the pulp is taken internally as a remedy whose effects must be that of the oil very nearly. The pulp is rubbed into the temples in headache, into the palms of the hands in palsy, and is introduced into the meatus of the urethra in stricture. The pulp is rubbed into the soles of parturient women to hasten the birth of the child, or the expulsion of the placenta. It is stuffed into deaf ears, rubbed over the top of the head in cases of prolapsus uteri, and is applied, with the oil to burns and scalds. See *Castor Oil.*

**CATALPA BUNGEI.**—楸 (*Ts‘iu*), 榎 (*Hia*).—The leaves of this Bignonial tree, confounded by some with the Melia, or Bead-tree, are said to fall very early in the autumn, and hence its name. During the T‘ang dynasty the leaves were worn as an ornament at the coming-in of autumn. The large tree yields timber of an excellent kind, used for making chess-men, chess-tables and weighing-scale frames. This tree is said to have been formerly in much repute as a remedy for surgical diseases. The bark is said to be stomachic, anthelmintic, and very useful as an ingredient in lotions for stimulating wounds, ulcers, cancers, fistulæ, and other indolent or obstinate sores. An extract is prepared from the bark, and the leaves are reputed to be very efficacious in the treatment of carbuncles, swellings, abscesses, struma, porrigo, specks on the cornea, &c., and are given in bronchitis and emphysema. Very similar properties are attributed by the Japanese to Catalpa syringifolia.

**CATECHU.**—烏爹泥 (*Wu-tie-ni*), 烏疊泥 (*Wu-tieh-ni*), 孩兒茶 (*Hai-rh-*

*ch'a*), 兒茶 (*Rh-ch'a*).—The names given in the *Pen Ts'au* to this drug are partly founded on the old notions that it was an earth or a preparation of tea, and partly upon some such Taic word as *Wuting*, represented in Chinese by the characters *Wu* and *Tié*, or *Tieh*. The very same notion is perpetuated in the old pharmacological name *Terra Japonica*, where the earth (in Chinese *Ni*) is fetched from Japan. The account in the *Pen Ts'au* is to the effect that Java, Siam, and the countries of the Indian Archipelago furnish a drug prepared by putting fine tea-dust into a bamboo tube, which is then closed up at both ends, and buried in the wet mud of a sewer for a long time. It is then taken out, the juice expressed, and then boiled down to a thick extract. Preference is given to the small, moist pieces, over the larger dry masses. These descriptions answer roughly to the Black and Pale Catechu of commerce. The country of the Laos tribes living between Yunnan, Annam and Siam, and a district in the north-western part of Yunnan fu, are said to have formerly yielded this drug. The astringent, antiphlogistic, styptic and corrective properties of this excellent drug are recounted, but at the present time it is confined to external use as a detergent, stimulating, styptic or constringing application. Prolapse of the rectum, toothache, spongy gums and all sorts of sores are treated in this way, when no poison is desired to be drawn out. Dr. WILLIAMS says that Black Catechu, extracted from the heart-wood of the Acacia Catechu (Leguminosæ), by boiling, is imported in some quantity for use in dyeing. The tree grows in Pegu and near the Gulf of Cutch, hence the substance is often called Cutch. "That brought from Bombay is friable, of a red-brown colour, and more hard and firm than that from Bengal. The cakes resemble chocolate, and when broken have a streaked appearance. Good Cutch has a bright uniform colour, a sweetish astringent taste, melts in the mouth, and is free from grittiness." The latter part of this description evidently applies as Dr. WILLIAMS (Chinese Commercial Guide. p. 90), himself suggests, to Pale Catechu, or Gambier, which see. There is a Black Catechu, the *Kassu* of Persia, which occurs in round, flat cakes, from two to three inches in diameter, and from half an inch to an inch in thickness, having all the properties of the Acacia Catechu extract. It is the product of the Areca palm or Betel-nut, so-called, prepared in India, and may be expected to occur in the samples imported, though it has not yet been met with.

**CATECHU, PALE.**—檳榔膏 (*Pin-lang-kau*).—See *Gamlier*.

**CAYENNE PEPPER.**—大椒末 *Ta-tsiau-moh*).—The seeds and pulp of the Capsicum are made into a soft preserve, which is in universal use as a condiment. Shansi people make a paste of the powdered seeds, and those of the Sesamum, and use it as a warm condiment.

**CEDRELA ODORATA.**—椿樹 (*Ch'un-shü*), 香椿 (*Hiang-ch'un*).—The wood of this tree resembles mahogany, and is used in cabinet-work. The bark is lighter in colour, and finer than that of Ailanthus, with which it is often confounded. It is used as an astringent in all asthenic, chronic fluxes. From trials with the bark of Cedrela Toona in India, in cases of chronic infantile dysentery, and in periodic fevers, it is obvious that some good qualities may be expected to arise from the use of the China bark, in the absence of foreign remedies. The leaves are eaten in the spring, when quite tender, by the Chinese, and the silkworm is fed upon them, as well as upon those of the Ailanthus. They are used to make a wash, in combination with the leaves of the Catalpa, as a remedy for baldness, and are taken internally as an anti-scorbutic and prophylactic ptisan. The bark of both the trunk and the root is said to be very useful in the treatment of the *Kan* disease of children. The fruit of the tree is said to be also astringent, and to be very useful in the treatment of affections of the eye.

**CELANDINE.**—知 母 (*Chí-mu*).—The Chelidonium majus (Papaveraceæ), is sometimes collected and described under this name, more correctly given to Anemarrhena asphodeloides. It is used as an emetic and expectorant.

**CELERY.**—苦 蘄 (*K'u-kin*), 芹 菜 (*K'in-ts'ai*).—This plant, the Apium graveolens of botanists, is confounded with parsley and water-cresses, all these plants being eaten in the raw state in China, as elsewhere. The coarse red-stemmed variety is poisonous, and any sample of so-called celery, or parsley, offered for sale in the Chinese streets should be eaten with great caution by Europeans. Parsley, and the plant called Fool's parsley, are both called 野 芹 菜 (*Yé-k'in-ts'ai*). Celery is sometimes bleached and eaten raw by the Chinese, but they generally prefer it cooked to some extent. The flavour of the Aralia edulis, another Umbelliferous plant, which is eaten in Japan, very much resembles that of celery. Alterative, cooling, laxative, nutrient, and other properties akin to those credited by popular opinion in England to this class of raw salads are ascribed to it. Water-cress is apparently indicated by the name 水 芹 菜 (*Shwui-k'in-ts'ai*).

**CELOSIA ARGENTEA.**—青 葙 (*Ts'ing-siang*), 草 決 明 (*Ts'au-kiueh-ming*).—This plant, a member of the Amaranths, is said by the Chinese to be the wild Coxcomb, or the plant from Kwanlun. It grows all over the country, but Ningpo (Chehkiang) furnishes the black, shining seeds which are generally used in medicine. The plant is a troublesome weed among the flax, but the Chinese gather and consume it as a vegetable. The seeds are a little smaller than those of the Celosia cristata. Cooling, anti-scorbutic, anthelmintic, vulnerary and tonic properties are attributed to this plant which shares with Cassia Tora the reputation of clearing away films from sore eyes. The bruised seeds are stuffed into the nostrils in epistaxis, a frequent disease amongst the Chinese.

**CELOSIA CRISTATA.**—雞 冠 (*Ki-kwan*).—This species of Coxcomb is a common weed in China, although there are good cultivated varieties. The flowers are red, yellow or white, and the seeds, flat, black and glossy. From the prevailing red colour of this species, the whole plant is fancifully assumed to benefit all diseases of the blood, such as hæmorrhages, fluxes, piles, menorrhagia and deficiency of the lochia.

**CENTAURY.**—龍 胆 (*Lung-tan*).—The root of a species of Erythræa (Gentianaceæ), is met with in use as a cooling and arthritic remedy, classed with and named after Gentian, also called *Lung-tan*, or "Dragon's gall."

**CENTETES ILLIGER.**—猬 (*Wei*), 蝟 鼠 (*Wei-shü*).—Some, or several species of this genus, as well as the hedgehog, are described under this name in the *Pen Ts'au*. Its body is said to be like that of the beaver, the feet short, and the tail more than an inch in length. It is said to be able to confront the tiger. This animal, the tenrec, or tendrec of books on natural history, is common in Hupeh, Sech'uen and most provinces of China. The bristles are used to make brushes. The skin of the head and face 猬皮 (*Wei-p'i*), or the actual snout of this creature, and of the common hedgehog, is met with in the shops, as the common officinal preparation, although every part of it appears, from the *Pen Ts'au*, to be endowed with some extraordinary property or another. Astringent, styptic, sedative, stomachic, vulnerary and other properties are confidently ascribed to this worthless rubbish. The fat of this animal is said to have the power of acting upon metals and minerals.

**CERASUS COMMUNIS.**—郁李 (*Yuh-li*), 雀梅 (*Ts'ioh-mei*).—This wild species of Cherry, with the *Ts'ioh-mei*, or "Bird-cherry," the Cerasus Padus of botanists, does not produce a pleasant fruit. Shensi, Kansuh and Honan produce this tree for the sake of the fruit, the bitter kernels of which 郁李仁 (*Yuh-li-jin*), are met with in the druggists' shops. Demulcent, diuretic, lenitive and deobstruent properties are ascribed to these pips, which evidently contain hydrocyanic acid. They are given in dropsy, rheumatism, febricula, cardialgia and indigestion. The root of the cherry-tree is said to be anthelmintic, and to be very useful in all affections of the teeth.

**CERASUS PSEUDO-CERASUS.**—櫻桃 (*Ying-t'au*).—The bright red fruit of this tree, miscalled a peach, is compared by the Chinese to some such gem as a sapphire. It is met with in Kiangnan, Hupeh and Honan. Several varieties appear to exist, some of which have been introduced into England. Its fruit is preserved as a sweetmeat with honey. Astringent and cosmetic properties are referred to the tree; the leaves, root, branches and flowers being officinal.

**CERUSE.**—粉錫 (*Fen-sih*).—See *Carbonate of Lead.*

**CEYLON-MOSS.**—石花菜 (*Shih-hwa-ts'ai*)—This is the Gracilaria lichenoides, really an Algal, and much esteemed in Ceylon and the East as a food. Species of Sphærococcus, almost identical with Gracilaria, are met with in China, and may be very well substituted for it as a demulcent and nutrient in dysenteric affections. The Indian Pharmacopœia of Dr. Waring includes this seaweed as a useful adjunct to the Materia Medica.

**CHALK.**—畫粉 (*Hwa-fen*), 白土粉 (*Peh-t'u-fen*).—This substance, a carbonate of lime, is comparatively rare in the mineral strata of China. It was observed between Peking and the Great Wall by the embassy of 1793. It is confounded in Chinese works with marly clays, and with porcelain clay, a silicate of alumina. Some such substance as chalk, or French chalk, a magnesian mineral, is used in painting, and is said to be astringent, corrective and absorbent. A mineral called Chinese white is employed in England as a pigment.

**CHAMOMILE.**—甘菊花 (*Kan-kiuh-hwa*).—This bitter, aromatic plant is more correctly named 苦菊花 (*K'u-kiuh-hwa*). The flowers of Chrysanthemum album, and Matricaria chamomilla are excellent substitutes for the true Anthemis nobilis, which has not been met with in Hupeh. The Anthemis apiifolia is said by Burnett to be found as its representative in China. The Chinese are very fond of fumigating and steaming sore eyes with these Composite flowers infused in boiling water. Fomenting and poulticing are operations only practised in Mission Hospitals.

**CHARCOAL, ANIMAL.**—骨炭 (*Kuh-tan*).—This substance is probably unknown to the Chinese. There is a kind of small charcoal (wood), called 雞骨炭 (*Ki-kuh-tan*), or "fowl-bone charcoal," the name of which seems to suggest that bones have been wont to be made into charcoal. This small charcoal is used to cook food for the sick, being supposed to be free from all poisonous exhalations.

**CHARCOAL, VEGETABLE.**—板炭 (*Pan-tan*), 百草霜 (*Peh-ts'au-shwang*), 白炭 (*Peh-tan*).—Charcoal is directed in the *Pen Ts'au* to be made from oak wood. Large quantities of charcoal are used in ordinary cooking, and especially in boiling medicines, in the houses of the better classes in China. The powder 炭末 (*Pan-moh*), is directed to be mixed with water and taken after the accidental swallowing of coins or metallic substances. Mixed with honey, it is given in acute diseases of the throat, or is combined with other drugs in the treatment of dysentery. The charcoal-dust is mixed up with Sesamum-oil and applied to burns and scalds. Carbonic acid is used as a disinfectant, all Chinese families making it a practice to burn a portion of charcoal in their houses on the last night of the year. This is partly for superstitious reasons and partly on sanitary grounds. It is curious how few accidents occur amongst the Chinese from the inhalation of the fumes of charcoal. *Peh-ts'au-shwang* is only another name for soot, which see.

**CHAVICA BETLE**.—蒟醬 (*Kü-tsiung*).—See *Betel-pepper*.

**CHAVICA ROXBURGHII.**—蓽茇 (*Pih-poh*).—See *Long Pepper*.

**CHEESE.**—乳腐 (*Jü-fu*), 牛奶餅 (*Niu-nai-p'ing*), 乳餅 (*Jü-p'ing*).—In spite of a plentiful supply of Chinese names for this important article of diet, which is imitated by the cheaper bean-curd 豆腐 (*Tau-fu*), of every Chinaman's diet, most vicious efforts have been made to transfer this word into Chinese, varying with the dialect of the transgressor. The *Pen Ts'au* gives several modes of preparing cheese from milk, or from a mixture of cream and buttermilk. The latter is called 漿水 (*Tsiang-shwui*), but is not used for any other purpose, although it makes an excellent diet for infants. Vinegar replaces rennet in Chinese cheese-making. A sort of cheese-maccaroni called 乳線 (*Jü-sien*), still made by the Chinese, is also described in the *Pen Ts'au*. Laxative, diuretic, nutritive and other properties are referred to this article of food, which is strongly recommended to be eaten in dysentery, and by weak children. To both of these latter suggestions, strong confirmation could be brought by the author. No food suits children so well as sound cheese eaten *as a meal*, in moderation.

**CHENOPODIUM RUBRUM.**—赤莧 (*Ch'ih-hien*), 莧菜 (*Hien-ts'ai*)—This plant is distinguished by its rhomboid, or rounded-pointed, entire leaves, with a red, jagged patch in the centre of each leaf. The fruit is a thin utricle, containing a single, red, polished seed. This pot herb is much cultivated and eaten in Hupeh. Five varieties or species of Chenopods or Amaranths are described under this head in the *Pen Ts'au*, including perhaps the Spinach plant, said by BURNETT to grow in China. Cooling, lenitive, demulcent and insecticide properties are ascribed to the seeds of this and other varieties of Chenopodium. The Amaranthus caudatus or "love-lies-bleeding," formerly eaten as a vegetable, is called 野莧菜 (*Yé-hien-ts'ai*).

**CHERRY.**—郁 李 (*Yuh-li*).—See *Cerasus communis*, and *Cerasus pseudo-cerasus.*

**CHESTNUT.**—栗 (*Lih*).—There is considerable confusion amongst the Chinese, between the Oak and the Sweet Chestnut, from the resemblance of the nut of a species of Castanea, called 莘 栗 (*Sin-lih*), to an acorn. The tree is large in China, and the leaves very large in one variety. One, two or three nuts are found within the large, dehiscent spiny fruit, so constantly spread for sale in Chinese streets, in both the raw and the roasted forms. There is a flat, smooth-fruited variety in Hupeh, called 板 栗 (*Pan-lih*), and a variety whose nuts are said to resemble the hazel-nut. The sweetest come from Kiangnan and from the north. The Sanscrit name is expressed in Chinese as 篤 迦 (*Tuh-kia*). The fruit of Aleurites is sometimes called 石 栗 (*Shih-lih*), and that of the Æsculus is called 天 師 栗 (*T'ien-sz'-lih*). The latter resembles the American Horse-chestnut. The nuts are reckoned to be nutrient, and are eaten with chicken, though not thought to be very digestible. A particular kind of sand is cried in the streets of Hankow for heating these nuts in, the underground nut being cooked in the same way, to a large extent. Vulnerary, resolvent and other properties are referred to the husk, and the bruised nuts are sometimes made into a poultice. The root is said to be used in hernia or hydrocele.

**CHICORY.**—苦 㮶 (*K'u-t'u*), 荼 (*T'u*).—The plant known by this name, and assumed by Dr. WILLIAMS to be a Tussilago, or Coltsfoot, is probably a species of Cichorium. The leaves are said to have been made into a tea, to prevent sleep. It is curious that the root of this plant should be used in the West as a substitute for coffee, which certainly tends to produce wakefulness. The character *T'u* may be written thus 荼 (*T'u*), and it is this character which is found in the Classics replacing the character 茶 (*Ch'a*). The present tea-leaf was probably not that of the olden days. During the reign of a prince of the Han dynasty, the word *T'u* for the character 荼 (*Ch'a*), was interdicted, and directed to be pronounced *Ch'a*. Subsequently this was evaded by omitting the top stroke of the interior part of the character, and still calling the character by its old name *T'u*. In some instances the radical for wood was added at the side. It is to be observed that the word for tea in the *Pen-Ts'au*, still employed in letter-writing, and often put upon tea-boxes, is 茗 (*Ming*). By the use of this word all these confused names were avoided. See *Cichorium*.

**CHIMONANTHUS FRAGRANS.**—蠟 梅 (*Lah-mei*), 黃 梅 花 (*Hwang-mei-hwa*). Several species of the white, fragrant flowers of this plant (Calycanthaceæ), are described in the *Pen Ts'au*. The shrub is sometimes grafted. The flowers, mounted on brass wire, are the favourite winter-ornament of Chinese women of all classes. For some reason this plant received the name of the Apricot, *Hwang-mei*. The flowers are said to be cooling and sialagogue. The Chinese seem to have noticed that peculiar arrangement of the woody structure next the bark, discovered by MIRBEL. They macerate the tree in water and then polish it to a beautifully black, brilliant surface. The bark of some of the Calycanths is very aromatic, being used in America as a substitute for that of Cinnamon. Of this however the Chinese have taken no account.

**CHINA GRASS.**—苧 蔴 (*Chü-ma*).—This is the name of the fibre produced by the

Bœhmeria nivea, or Urtica tenacissima, which see. Coarser sorts of grass-cloth are furnished by the fibres of Sida tiliæfolia, and Dolichos bulbosus. It is a misfortune that this Nettlewort should have been hastily assumed by scientific Englishmen to be a grass.

**CHINA ROOT.**—土茯苓 (*T'u-fuh-ling*).—See *Smilax Chinensis and Pachyma cocos*.

**CHLORANTHUS·INCONSPICUUS.**—珠蘭 (*Chü-lan*), 鷄爪蘭花 (*Ki-chau-lan-hwa*)—This plant is briefly mentioned in the *Kwang-kiun-fang-pu*. The flowers, with those of Aglaia odorata, are mixed with certain kinds of tea, called after the plant 珠蘭茶 *Chü-lan-ch'a*. This is a very excellent, but expensive tea, the Scented Caper of commerce. The root of this plant would be worth trying as a stimulant and sudorific remedy in malarious fevers, as the root of a very similar species is extensively used in Java in the intermittent fevers of that island, according to Blume.

**CHLORODYNE.**—薄荷藥 (*Poh-ho-yoh*).—This excellent remedy is highly appreciated by the Chinese, although as yet they have no distinctive name for it. It acts very affectually in colic, and at the moment of an attack of diarrhœa, or even dysentery. The name "peppermint-medicine" is chosen because of the taste, and from the fact that the Chinese are wont to employ pennyroyal and other mints, called *Poh-ho*, in precisely the same painful affections of the belly as this popular patent medicine is taken for. Missionaries fond of dabbling in physic would do well to confine their exploits to the use of this single drug, so generally useful and harmless.

**CHLOROFORM.**—痲藥 (*Ma-yoh*).—This important drug is, of course, not known to the Chinese, apart from the experience of Mission Hospitals. It has a most excellent effect on the Chinese, but should always be given with much caution to confirmed opium-smokers, and generally with more care during the very hot weather. The repetition of the drug, towards the close of the operation, when consciousness has been already restored, is a dangerous experiment, in the author's experience. The word *Ma-yoh*, appears to be more generally applied to local anæsthetics than to those which act through and all over the system. The name seems to have been taken from the word applied to the painless eruptions of leprosy, which is called 大麻瘋 (*Ta-ma-fung*). The flowers of a species of Cannabis (火麻, *Ho-ma*), and of the Datura (曼頭羅, *Man-tóu-lo*), were formerly infused in wine, and drunk as a stupefying medicine preparatory to acupuncture, the opening of abscesses, and the use of the actual cautery. A Solanaceous plant called 押不蘆 (*Yah-puh-lu*), probably identical with the Atropa mandragora of botanists, is said to be capable of causing a trance of three days' duration. Hwa-To, a celebrated surgeon of the Han period, the Machaon of Chinese historical romance, used this latter plant. Aconiteroot, the tubers of Pinellia tuberifera, Long Pepper, the root of Heterotropa asaroides, the flowers of Hyoscyamus, Azalea, Andromeda and Rhododendron, the tubers of Arisœma and Arum pentaphyllum, an unknown gum-resin called 悶香 (*Mwan-hiang*), and the fat extracted from the head of the toad, are substances which are reputed to have anæsthetic properties, generally employed locally. These substances and other imaginary or superstitious formulæ are said to be employed by kidnappers of children, who manufacture 藥餠 (*Yoh-p‘ing*), or "medical confectionary" containing these drugs. On this account such drugs, called 迷藥 (*Mi-yoh*), are virtually forbidden to be sold or employed. Robbers are known to use a sort of pastille containing the *Mwan-hiang* and other quieting perfumes, by means of which they certainly seem to render the sleep of their victims very profound.

**CHRYSANTHEMUM ALBUM.**—白菊花 (*Peh-kiuh-hwa*).—There are innumerable varieties of the Chrysanthemum in China, of which at least thirty-five are said to be indigenous in Honan. Four distinct treatises have been written on the cultivation of this Composite flower. The white variety here indicated is said to have originally come from Nan-yang, in Honan. The dried fragrant flowers are said to be tonic, sedative and cosmetic. They are principally used as a wash for sore eyes. A tincture is said to be useful in debility. The ashes of the flower are said to be insecticide. The flower is taken in the form of powder to recover the drunkard. So many substances are said in the *Pen Ts‘au* to be anti-vinous, that it is difficult to know whether to refer it to the good desires of the people, who are commonly credited with being temperate, or to the bad qualities of their wines.

**CICHORIUM.**—苦菜 (*K‘u-ts‘ai*), 苦苣 (*K‘u-kü*), 苦蕒菜 (*K‘u-mai-ts‘ai*), 荼 (*T‘u*).—Chicory (Cichorium Intybus) and Endive (C. Endivia), are both raised and eaten as a pot herb or salad by the Chinese, the greatest gardeners in the world. The herbage is believed to be tonic, antiscorbutic, sedative to the heart, alterative, and good for bloody urine, piles and carbuncles. The root is recommended in diarrhœa, dysentery, dysuria and hæmaturia. The flowers and seeds are given in catarrh, jaundice and as a cordial in debility.

**CICUTA.** —藁本 (*Kau-pen*).—This species or variety of the Cicuta (Umbelliferræ), was formerly used as a scent, and does not seem to be virulent, like the British species, Cicuta virosa. It is said to resemble the Angelica or Levisticum, both of which have replaced it to a very great extent in Chinese pharmacy. The Chinese plant has small, bipinnate, entire leaves according to the *Pen Ts‘au*. The yellowish-brown, branching nodulated roots, with small rootlets and large portions of the stem still attached to them, are brought from Shensi and Kiangnan. They have the same smell as the *Ch‘uen-kung*, and a sweetish and somewhat acrid flavour. Stimulant, antispasmodic, arthritic, deobstruent, alterative and resolvent qualities are attributed to the root and seeds. Cosmetic preparations and washes for itch are said to have been formerly made from the root.

**CINCHONA.**—金丹皮 (*Kin-tan-p‘i*) 金鷄哪 (*Kin-ki-na*).—This bark is not known to the Chinese medical faculty, quinine having taken the place of Cinchona in foreign practice to a very great extent, since the opening up of commercial and general intercourse. The word *Kin-tan-p‘i* expresses the colour, value and nature of this most useful drug, especially in the form of the yellow bark. *Kin-ki-na* is the name coined by Dr. HOBSON for Cinchona. Powdered cinchona bark, especially a mixture of the red and yellow kinds in powder, is an exceedingly valuable remedy in the treatment of infantile diseases among the Chinese. See *Quinine*.

**CINNABAR.**—丹砂 (*Tan-sha*), 朱砂 (*Chŭ-sha*), 辰砂 (*Shin-sha*), 硃砂 (*Chŭ-sha*).—This important ore of mercury, a sulphide of the metal, is brought from Yu-yang chau (Sech‘uen), Lien chau (Kwangtung), King-yuen fu, and Kwei-lin fu (Kwangsi), Kwei-yang fu, Sz’-nan fu, T‘ung-jin fu, Tu-yun fu, P‘ing-yueh chau, Ta-ting fu, and Tsun-í fu (Kwei-chau), Chang-sha fu, Yuen-chau fu, and Yung-shun fu (Hunan), and from Shang chau in Shensi province. Kin-chau, the Ma-yang hien (Hunan) of the present day, formerly yielded excellent cinnabar. That coming from Shin-chau fu (Hunan), is said to be the best, hence the drug is called in prescriptions *Shin-sha*. Cinnabar is also made from mercury, "by the reaction of sulphur (and saltpetre says Dr. Williams) on the metal in small copper furnaces, in which it is collected, after sublimation, in acicular crystals." Both native and artificial cinnabar are said to be exported to Europe and to Japan. Cinnabar was formerly confounded with realgar and orpiment. It is a coarse, shining powder, with a varying depth of red colour, according to the degree of pulverization. The finest is used as a pigment, and in making red lacquer for varnishing. The coarser kinds, sometimes met with in definite cakes, are employed in external medication or are used to extract mercury. More than ten descriptions of cinnabar are distinguished in Chinese works. Good cinnabar does not leave any stain on paper. Hupeh, Yunnan and Shensi formerly yielded this ore of mercury, which was investigated, according to the Rev. J Edkins, by the Chinese alchemists as early as the Christian era. It was called by them the 仙丹 (*Sien-tan*), or "Immortal elixir," and equivalent of the Philosopher's Stone of the alchemists of the west, who *might* have obtained their knowledge of this and other curious substances from the early Chinese chemists, through the intercourse of Mahommedan traders from Arabia and the Persian Gulf, with the people of Southern and Eastern China. Persia and the Si-hu appear to have supplied cinnabar to the Chinese. Cinnabar is said to be connected with the south, and is believed to be at the head of all minerals and metals, being capable of transmutation, in equal periods of two hundred years, into each or any of the five principal metals, finishing with gold. For medicinal purposes the coarser samples are powdered, levigated and dried. It is said to be tonic, alterative, sudorific, antiperiodic, alexipharmic, prophylactic and escharotic. Stories of extraordinary longevity resulting from the drinking of the water of a well impregnated with cinnabar, situated in Ma-yang hien (Hunan), led to the preparation of panaceas of all sorts from cinnabar, ginseng and other drugs. Children were formerly dosed with this mercurial preparation as soon as born, with some dim idea of perhaps congenital syphilis. Small quantities are worn in bags by children, in order to ward off frightful spirits and actual chorea. A small quantity is taken as a prophylactic by the whole Chinese population of this part of the country on the great festival held on the fifth day of the fifth month. At the present time this drug is used almost exclusively as an external remedy, with which syphilitic and every sort of sore or eruption is dusted. Borneo camphor is mixed with it, or it is rubbed up with lard and applied to parts affected with pediculi. The salivating effects of this and other preparations of mercury are generally understood at the present time by the Chinese. See *Vermillion.*

**CINNAMOMUM TAMALA.**—天竺桂 (*T‘ien-chuh-kwei*).—A kind of Cinnamon is spoken of in the *Pen Ts‘au* as of Indian origin, but yielded by trees growing in Fuhkien, Canton, Kwangsi and Chehkiang. The bark is said to be thin, and much less acrid than the cassia generally. This is probably the C. Tamala, or the C. iners of the Indian botanists. The folia tamalapathri (or malabathri), which have a strong aromatic flavour, and were formerly exported from China, are leaves of this tree. It probably yields some of the Cassia-buds exported to India and Europe. Its properties are said to be the same as those of the *Kwei-sin*, the best decorticated cassia.

**CINNAMON.**—肉 桂 (*Juh-kwei*), 玉 桂 (*Yuh-kwei*).—This name is retained out of deference to Dr. WILLIAMS, who speaks of a thick "fleshy cassia" or the true cinnamon, growing in Annam or Cochin-china, and possibly in Kwangsi province. The province of Kweichau, formerly written 桂 州 (*Kwei-chau*), would seem to have yielded cinnamon or cassia. Two places in Hunan (Kwei-tung hien and Kwei-yang chau), are also named after the cassia. The name *Yuh-kwei* is given on the authority of Dr. MORRISON, who is generally accurate, but cannot be confirmed in this quotation. See *Cassia.*

**CIRSIUM?**—小 薊 (*Siau-ki*). 大 薊 (*Ta-ki*), 刺 薊 (*Ts‘z-ki*).—Several species of Cirsium, Cnicus, Centaurea and Carduus, (curiously named after various animals), all members of the Cynaraceous branch of the Compositæ, are included under the name of *Ki.* Their roots are eaten as in other countries, and with the leaves and stalks are held to be nutrient, alterative, antiscorbutic, astringent, demulcent and discutient. The *Siau-ki* is more used internally, whilst the *Ta-ki* is applied as a poultice to carbuncles and swellings.

**CIRSIUM LANCEOLATUM.**—續 斷 (*Suh-twán*), 川 斷 (*Ch‘uen-twan*).—The brown wrinkled roots of this Composite plant are met with in short pieces very hard, and of a dirty white colour in the interior. The taste is sweetish, mucilaginous, with a bitterish after-taste. P‘u-chau fu (Shansi), Han-chung fu (Shensi) and several places in Sech‘uen, yield this plant. Tonic, vulnerary, arthritic and demulcent properties are commonly attributed to the whole of the plant, which is credited, as its name signifies, with the power of joining together broken bones and tendons. The root is given in diarrhœa, fluxes of all kinds, urinary and puerperal affections.

**CITRON, BUDDHA'S.**—枸 櫞 (*Kau-yuen*), 佛 手 柑 (*Fuh-shau-kan*), 香 櫞 (*Hiang-yuen*).—This is the fruit of the monstrous species of Citron, called Sarcodactylis odorata, formed by the natural separation of the constituent carpels of the fruit. The tree is grown near water in Kiangnan, Fuhkien, Canton, Kweichau and other provinces. Su-chau fu (Kiangsu), T'siuen-chau fu (Fuhkien), and Cháu-chau fu (Canton) yield the best kinds. The leaves of the tree are long and pointed, and the branches prickled. The yellow fruit attains a very large size in some instances, and is much prized in Central and Northern China, where it is carried in the hand, or placed on tables, to give out its strong and delicious perfume. It is also placed in clothes-presses with the same object. In the south, where the fruit is plentiful, it is made into a preserve, or the juice used to wash fine linen cloth. The Jews carried the citron (ethrog) in the left hand, at the Feast of Tabernacles as a sacrifice of a sweet smell, and possibly the word

Buddha's hand denotes some practice of the Chinese in connection with the worship of Buddha. The root and leaves of this Aurantiaceous tree are officinal in the same cases as the dried peel, which see.

**CITRON-PEEL.**—佛手片 (*Fuh-shau-p'ien*).—The fruit of the Citron (Sarcodactylis) above-mentioned, is brought from Jin-hwái ting, in Kweichau in fine, dried slices. They are thin and shrivelled, the greenish-yellow cuticle fringing the white, inert, cellular tissue which forms the greater part of the drug. The smell is citron-like, but faint, and the taste aromatic and bitter. Some of the drug met with in the drug-shops is very dark. Stomachic, stimulant, tussic, expectorant and tonic properties are attributed to this substance.

**CITRULLUS.**—西瓜 (*Si-kwa*), 寒瓜 (*Han-kwa*).—These are the large, round, or globose, parti-coloured fruits of the *Si-kwa* or red-fleshed watermelon, so largely eaten in China as a cooling fruit in the very hot weather. It has much less flavour than in other countries, but is very juicy. Melon-seeds, 瓜子 (*Kwa-tsze*), eaten in tea-shops are usually the seeds of the gourd parched in order to facilitate their being cracked by the teeth, in the mouth, without the aid of the fingers. The kernels are said to be demulcent, pectoral and peptic. This "Western melon" is said to have been so named from the fact that the Kitai, or Kitan, having routed the Turkic tribes called *Hwui-ki*, the seeds were introduced into northern China from their country, and became general in China in the tenth century. There is a white or paler red variety, much less wholesome. This melon should be eaten with caution, as it very frequently brings on severe diarrhœa, and even cholera, according to Chinese authors. Liquid night-soil is largely used in the cultivation of all these melons.

**CITRUS AURANTIUM.**—柑 (*Kan*), 橘 (*Kiuh*).—See *Orange, Mandarin, and Orange, Sweet.*

**CITRUS AURANTIUM VAR. SCABRA.**—化橘紅 (*Hwa-kiuh-hung*).—The dried peel of this immature orange, a variety of the Sweet Orange, is brought from Hwa chau, in Káu-chau fu (Kwangtung), and sold at a very high price in Central China. It is externally of a dark brown, or blackish colour, and covered with a yellowish bloom, which is seen, by means of a glass, to consist of short hairs. The inner surface is of a dirty white colour. As usually sold in the shops it is put up in the form of a six-rayed star, made by dividing into six parts the fruit, or rind, from nearly the apex to the bottom, and doubling the segments of the peel upon themselves into a flat star. Two whole fruits have their rind thus treated, the pulp being taken away, and the two starlike pieces bound together in the centre with red silk thread. These sell for about a tael a pair. The pieces vary from two inches and a half to three inches and three quarters in diameter, the smaller pieces fetching the highest price. It is made into a tincture, and is much esteemed in the central and northern provinces as a sedative, carminative, stomachic, and expectorant remedy.

**CITRUS BIGARADIA.**—枸橘 (*Kau-kiuh*).—The round fruit of this thorny orange-bush, which yields strongly smelling snow-white flowers, is medicinal. The peel is very thin, and very bitter, and is usually mixed with the Citrus microcarpa in the form of the immature dried fruits cut across. The leaves are given in cynanche, the prickles are said to relieve toothache, the pips are given in dysentery, and the bark of the shrub is prescribed in apoplexy. The fruits are given in molluscum and some other skin-diseases.

**CITRUS FUSCA.**—枳殼 (*Chi-koh*).—The dried fruits of this species of orange, in various degrees of maturity, are cut across and sun-dried. The drug then forms circular discs of from one and a-half to two inches in diameter, nearly flat on the cut surface, but convex on the exterior. The peel is very hard and thick, being half of the diameter of the fruit in the smaller discs. Externally it is rough, of a reddish or blackish-brown colour, and internally of a buff colour. The taste is moderately bitter and aromatic. The drug is brought-from Sechʻuen, Han-yang fu (Hupeh), and Shang chau (Shensi). Cooling, stomachic and deobstruent properties are ascribed to the fruit which would seen to be in great favour, from the large number of prescriptions given under this head in the *Pen Tsʻau*. The rind of the fruit 枳茹 (*Chi-jü*), the bark of the tree, the bark of the root, and the young leaves are all officinal, the latter being recommended in place of the common tea-leaf.

**CITRUS FUSCA.**—枳實 (*Chi-shih*).—These are the fruits of apparently the same Aurantiaceous tree as the above, in a smaller and more immature form, supposed to be more cooling than the *Chi-koh*.

**CITRUS MICROCARPA.**—青橘皮 (*Tsʻing-kiuh-pʻi*), 青皮 (*Tsʻing-pʻi*).—These are the small, smooth, unripe fruits of several species of Citrus little known, dried whilst green, and cut into thin slices or sections about half-an-inch to an inch across, or more. When fresh they are very fragrant, but are aften adulterated or replaced by the peel of the pumelo or other small fruits of the genus Citrus. They probably have nothing to do with such an imaginary species as C. microcarpa, which name is only retained for purposes of distinction. The uses are the same as those of the other sorts of orange-rind.

**CITRUS OLIVÆFORMIS.**—金橘 (*Kin-kiuh*), 盧橘 (*Lu-kiuh*).—The fusiform fruit of the small species of "Golden orange" is the Kum-quat of the Cantonese. The word Loquat (Lu-kiuh) is more correctly applied to this fruit than the *Pʻi-pa*, or Eriobotrya japonica. It is also called Nutmeg Orange from its resemblance to a nutmeg. It is sold in small foreign bottles in Hankow, being much scarcer in the central provinces. It is used as a dessert, or garniture at weddings, and is made into a conserve. The seed only is used medicinally as a stimulant, carminative, antiphlogistic, anti-vinous and deodorizing remedy. See *Loquat.*

**CLAY-IRON BALLS.**—丁子藥 (*Ting-tsze-yoh*).—This is a term used by TATARINOV for a mineral substance not found in the *Pen Tsʻau*. The words *Ting-tsze* refer to the tadpole, which is so called from its resemblance to a nail with its head and sharp-pointed tail. Such a substance is likely to be used as a medicine by the Chinese, and is in fact enumerated in the *Pen Tsʻau*, along with the spawn of the frog, as a topical application in lichen, eczema and scabies, and is used with walnut-shells as a hair-dye.

**CLEMATIS VITALBA.**—通草 (*Tʻung-tsʻau*), 木通 (*Muh-tʻung*).—The jointed woody stem of this climbing Ranunculaceous plant, is sold in pieces of a foot in length, and from nine to ten inches in circumference. The wood is yellow, and the vascular tissue is arranged in plates, passing from the centre to the circumference, and open enough to allow air to be blown through, as the Chinese name indicates. Two or more species are alluded to in the *Pen Tsʻau.* The wood is bitter to the taste, and is pronounced to be a stimulating, diaphoretic, laxative, diuretic, stomachic and vulnerary drug, quickening all the senses and faculties. The root is used in goitre, and the fruit is reported to be tonic, stomachic, and diuretic. Most of these qualities are mere theoretical inductions from the open character of the woody tissue of the plant. The provinces of Shansi, Shensi, Hunan and Kiang-nan furnish the drug.

**CLOVES.**—丁香 (*Ting-hiang*), 丁子香 (*Ting-tsze-hiang*), 鷄舌香 (*Ki-sheh-hiang*).—The evergreen tree producing the common clove (Caryophyllus aromaticus) is met with in Kau-chau fu, and Kwang-chau fu, in Canton province, according to Chinese works. It is said be diœcious, and to grow in Cochin China, Pulo Condor, and in the islands and countries of the Indian Archipelago. Cloves are imported to use as a condiment with meat, and in the south to distil the oil which is sometimes exported Good cloves, supposed to be the male flowers, are large, heavy, tapering, of a dark reddish-brown colour, having a hot acrid taste, and give out oil when indented with the nail. Warm, stimulating, carminative, corrective, stomachic, tonic, anthelmintic, and derivative properties are attributed to this spice, which is given in cases of offensive breath, diarrhœa, cholera, infantile disorders of the belly, uterine fluxes, sterility, and many other diseases. The crushed buds are applied to polypus narium, mammary sinus, cracked nipples, and sore eyes. The bark (丁皮), of the tree, somewhat thicker than cassia-bark, is used in toothache and as a domestic remedy. The twigs and root are also officinal.

**CNIDIUM MONNIERI.**—蛇牀子 (*Shie-chwang-tsze*).—These are the small, ovoid fruits of an Umbelliferous plant met with all over China. The mericarps are strongly ribbed, with one vitta betweem each rib, and the commissure is bivittate. The drug has very little odour, but a warm taste. It is said to act on the kidneys, and to be aphrodisiac, anti-rheumatic, sedative, astringent, vulnerary, and discutient. Washes and ointments are made from the crushed or powdered seeds, for bathing prolapsus recti, piles, fistulœ ani, and leprous or scabious sores. Li Shi-chin makes the very appropriate remark that because we are so familiarly acquainted with our own indigenous plants, we are apt to neglect them in search and favour of far-fetched drugs, of no better quality.

**COBALT.**—大青 (*Tu-tʻsing*), 洋青 (*Yang-tʻsing*), 扁青 (*Pien-tʻsing.*)—This substance, placed under *Pien-tsʻing* in the *Pen-Tsʻau*, and not clearly distinguished from malachite, is a kind of zaffer, or "powder-blue," or smalts, prepared by roasting the native arseniuret of cobalt. Cambodia is said to yield it. It contains silica and potash and is used in colouring glass, painting on porcelain, and glazing copper vessels, and in distemper. It is placed by Dr. Williams amongst the Chinese imports, but is not known to be used medicinally.

**COCHINCAL.**—呀蘭米 (*Ya-lan-mi*),—This substance is imported, according to Dr. Williams, into the South of China, the Cantonese having learnt the value of this insect (*Coccus Cacti*) as a dye. It is scarcely known in Hankow, nor has it been found in the *Pen-Tsʻau.*

**COCK'S CLAW.**—鷄爪子 (*Ki-Chau-tsze*), 枳椇 (*Chi-Kü*).—See *Hovenia dulcis.*

This name "Cock's claw" is a translation of the Chinese characters (*Ki-Chau-Tsze*).

**COCOA.**—果膏茶 (*Kwo-KauCh'a*), 哥哥 (*Ko-Ko*).—The Theobroma cocoa is said by BURNETT to be met with in China, but nothing is known of the plant here nor of the paste, save by those in close contact with foreigners.

**COCOA-NUT.**—椰子 (*Ye-tsze*).—The Cocos nucifera, or Cocoa Palm, "this most useful, of all trees," as Dr. WARING calls it, is met with in the island of Hainan, and on the adjacent mainland of the Canton province, as far north as Lat 20 50, according to Mr. SAMPSON. The fruit is compared to the head of a man, and some legend is given in the *Pen-Ts'au* of the head of the King of *Yueh* having been turned into the cocoa-nut fruit. The albumen is eaten by the Chinese, and the juice or milk 椰子漿 is variously described as heating and cooling, nutrient and serviceable in hœmatemesis and dropsy. The bark of the tree and the shell of the nut, which is sometimes carved and polished to make drinking vessels, are both recommended as astringentand styptic remedies. The milk of the cocoa-nut has been recently brought forward in India as a remedy in phthisis, debility, and cachexia. A tincture of the parched shell of the nut is said to be very efficacious in the secondary and tertiary effects of syphilis. The collection of the sweet juice of the flowering branch of this and of the Palmyra Palm, is alluded to as having been known in China since the close of the Han dynasty. Toddy or arrack, called 樹頭酒, or 嚴樹酒 (*Yen-shü-tsiu*), are said to be made on Hainan island. Dr. WARING speaks of a Toddy Poultice, made by adding the freshly-drawn juice of the Cocoa or Palmyra Palm to rice flour till it has the consistence of a soft poultice, and subjecting this to heat over a gentle fire, until fermentation commences. This poultice applied after the manner of the old-fashioned yeast poultice to gangrenous sores, carbuncles and indolent ulcers, is said to be very useful. ThePalmyra Palm called the 貝樹 (*Pei-shü*), the Borassus flabelliformis of botanists, is spoken of in the *Pen Ts'au*, in connexion with the Cocoa-nut, as yielding arrack, and a kind of white sugar, the *Jaggery* of India. The tree grows in the southern provinces. The fibres of the rind of the Cocoa-nut, and the brown cotton-like substance from the outside of the base of the fronds of the Palmyra Palm, may be used to staunch wounds.

**COFFEE.**—咖排茶 (*Kia-fi-ch'a*).—This name is coined or adopted from some such barbarous compound now rendered intelligible to the Chinese by long use. It is introduced into this list for the sake of its use in cases of opium-poisoning. New tea answers every purpose of the coffee, and should always be tried in the absence of the latter in the treatment of such cases.

**COIR.**—椶 (*Tsung*).—See *Hemp-palm.*

**COIX LACHRYMALIS.**—薏苡仁 (*I'-yi-jin*).—See *Job's Tears.*

**COLLDION.**—棉膏 (*Mien-kau*).—This preparation is scarcely known to the Chinese, and a name has had to be coined, denoting that it is made from cotton, (gun-cotton), and is used as a plaster. This surgical appliance finds very great favour with the Chinese who are fond of sealing up wounds and sores with plasters of all kinds.

**COLTSFOOT.**—欵冬花 (*Kw'an-tung-hwa*).—The flowering scapes of this composite plant, with the purplish bracts, and unopened yellow florets, are used in Chinese pharmacy in much the same way as in popular medicine in England. Two varieties are met with in China and Corea, one having a large flower. Shansi and Shensi furnish the drug which is given as an expectorant in apoplexy, phthisis, coughs and asthma, and as a demulcent in fevers. Eyes are bathed with the flowers steeped in hot water. The flowers are smoked, in much the same way as the leaves of the plant are used as extemporaneous tobacco in England, by Chinamen harassed with chronic cough.

**COMFREY.**—地 黃 (*Ti-hwang*).—The mucilaginous roots of a Borage-wort, not far removed from Symphytum, are sometimes mixed with Rehmannia. See *Rehmannia Chinensis.*

**COMMELYNA MEDICA.**—寸 冬 (*Ts'un-tung*).—These tubers, about an inch long, seem sometimes to be the produce of a species of Commelyna, or Aneilema, but more frequently they appear to be the tuberous roots of the Ophiopogon japonicus. They are used as a cooling and expectorant remedy. See *Aneilema medica.*

**COMMELYNA POLYGAMA.**—鴨 跖 草 (*Yah-chih-ts'au*), 竹 葉 菜 (*Chuh-yeh-ts'ai*).—This "duck's-foot grass," with its flat, narrow leaves and herbaceous calyx, is considered to be related to the Bamboo. The flower of this Spider-wort, as it is called by English botanists, is compared by the Chinese to a moth. This plant is much cultivated as a potherb, which is eaten in spring, and the juice of the flower is used as a bluish pigment in painting upon transparencies. Demulcent, diuretic and lenitive qualities evidently reside in the herbage of this plant, which is taken internally in cynanche, fevers, dysentery, abdominal obstructions and dysuria, and is applied topically to piles, abcesses and bites. Dr. HASSKARL, of Java, has published a valuable monograph on the Commelynaceæ of India, and the Indian Archipelago. In some countries the rhizomes of Commelynas become very starchy, and are eaten. Commelyna Rumphii is used in India as an emmenagogue. The identification of this plant is taken from TATARINOV. See *Aneilema medica.* and *Commelyna medica.*

**CONFECTION OF ALMONDS.**—杏 酥 (*Hang-sü*).—A fatty confection is directed in the *Pen Ts'au* to be made by mixing blanched almonds with ginger-root and liquorice, adding cream and beating all together. A fermented preparation is also given. Lenitive, tussic and expectorant properties are referred to this sort of domestic toffee. See *Almond-tea.*

**CONFECTION OF ROSES.**—玫 瑰 膏 (*Mei-kwei-kau*).—An excellent Syrup of Roses is made by Kiangsu people, and is sometimes called by this name, more appropriately given to the confection, useful in pill-making, but not known here.

**CONGEE.**—粥 (*Chuh*), 糜 (*Mi*), 餙 飯 (*Hi-fan*).—Rice-gruel is an excellent demulcent and cooling diet, or drink, in fevers, and after operations in Chinese Mission Hospitals. A Chinaman may be kept in bed for a week with nothing but this diet, without any hurt. Common or glutinous 糯 米 (*Jü-mi*), rice, maize, millet, wheat, taro-roots, Coix-grains, Euryale-seeds, and some thirty or more substances are directed, in the *Pen Ts'au*, to be made into ptisans, or broths and called 粥 (*Chuh*), rice being added according to desire. They are used as diuretics, demulcents, tussics, and laxatives, and are very serviceable in the treatment of all diseases having the word *dys* attached to them. Good rice-gruel, made by boiling stale rice for half a day at a steady rate, is an excellent means of increasing breast-milk in both natives and foreigners. Persons get very fat on a plentiful supply of this. Congee made with rice and blanched almonds, with a little loaf-sugar, or rice gruel made by boiling good rice and the seeds of the Nelumbium speciosum (Lotus) for four hours, are excellent diet-drinks.

**CARAMBOLA.**—五歛子 (*Wu-lien-tsze*), 五稜子 *Wu-ling-tsze*), 陽桃 (*Yang-tʻau*).—This fruit, the Averrhoa Carambola (Oxalidaceæ) of botanists, the Chinese gooseberry of Anglo-Chinese gardens, is met with in the southern provinces of Fuhkien, Kwangtung and Kwangsi. The fruit when ripe is three or four inches long, yellow, very formally marked by five prominent ridges, very juicy and rather sharp to the taste. The odour is pleasant, but disagreeable to some persons. The yield is very abundant, and the fruit sometimes reaches Hankow. Cooling, sialagogue and antiphlogistic properties are attributed to the fruit, which is pickled by some and preserved by others, according to taste.

**CONVOLVULUS**—防己 (*Fung-ki*), 漢防己 (*Han-fung-ki*), 木防己 (*Muh-fung-ki*). —This is a doubtful identification suggested by TATARINOV. The drug as sold in Hankow is a brown, bulky, amylaceous, tuberous root, split longitudinally into two or four pieces, and showing on its cross-section something of the same radiated disposition of the vascular tissue as is met with in Adenophora and other Convolvulaceæ. The smell is agreeable, and the taste bitterish and mucilaginous. Han-chung-fu in Shensi, Iʻtu hien (Hupeh), and Kienp'ing hien in Nganhwui yield this drug called in Chinese "self-protector" from its use in fevers, dropsies, rheumatism, pulmonary, choleraic and urinary diseases, all of a grave character, and all to be cured by this drug, in connection with Sophora flavescens, Rehmannia, Ginseng, and such like mucilaginous medicines not one whit better than so much liquorice-root. The fruit is officinal as a remedy in prolapsus recti, a very common disease in China.

**CONVOLVULUS.**—黨參 (*Tang-san*), 潞黨 (*Lu-tang*), 川黨 (*Chʻuen-tang*), 明黨 (*Ming-tang*).—This name denotes a species of Ginseng brought from 上黨, *Shang-tang*, (the present Lu-ngan fu in Shansi), for which it is substituted. It is met with in long, slender, tapering, pale yellow pieces, slightly twisted. They are about five inches in length, much smaller than the *Fang-tang-san*, which they very much resemble, being wrinkled or furrowed longitudinally and transversely. The interior is brittle, brownish-yellow, open in structure, with a lighter central pith. The taste is sweetish and slightly mucilaginous, resembling that of malt. The Hankow market is supplied from Shansi. The Sechʻuen variety, called *Chʻuen-tang*, is much larger, darker and more like *Sha-san*, or Adenophora. This identification is by TATARINOV, but there is do doubt that this as well as Adenophora, is a Campanulaceous plant, either a Campanula, or a Phyteuma. Its uses are much the same as ginseng. *Ming-tang*, or "clear ginseng from Shang-tang," is brought from Hupeh, and is very different in appearance. It is in hard pieces of four inches in length, tapering at both ends like a cigar, one being truncated and the other pointed. The cuticle is of a yellowish colour stained with reddish points, marked with fine lines or furrows, and the interior hard, white, porous, and easily separated from the translucent cortical part. Its uses are the same as the *Tang-san*. All these drugs, including *Fang-tang-san*, may be called Bastard Ginseng, as they are all used to adulterate, or to replace Ginseng. See *Campanula*.

**CONVOLVULUS.**—紫菀 (*Tsze-yuen*), 夜牽牛 (*Yé-kien-niu*). This Convolvulaceous root is fibrous, flexible, and of a reddish brown colour, having a fragrant smell, and but little taste. Iʻ-chau fu in Shantung, Han-chung (Shensi), and the country of the Ngai-lau-i, a tribe of Laos, yield the best kinds. Hingkwoh and other places in Hupeh also yield the drug, which is much used in the treatment of pulmonary affections, and in hœmoptysis, hœmaturia, puerperal hœmorrhage, and dysuria. The plant has never been examined, but it probably differs but little from Convolvulus (Pharbitis) Nil.

**CONVOLVULUS REPTANS.**—菠稜 (*Po-ling*), 菠菜 (*Po-tsʻai*).—This plant is largely cultivated in Central China as a vegetable eaten in spring, and somewhat resembling spinach in flavour. It is said to be cooling, demulcent, laxative, and alterative. This plant is said to have been originally brought from some such country as Nepal.

**COOKIA PUNCTATA.**—黃皮果 (*Hwang-pʻi-kwo*).—This Aurantiaceous plant, yielding the delicious "yellow-skinned" fruit called *Whampee*, is common in Southern China, and in the Indian Archipelago. It is briefly mentioned in the *Pen Tsʻau* as coming from Hwang chau in Kwangsi.

**COPAL, INDIAN.**—吧嗎油 (*Pa-ma-yú*).—This White Dammar, or Gum Animi is the product of certain species of Dipteraceous trees, allied to, if not identical with, the Vateria Indica, met with in Borneo and Sumatra. It exudes from the tree in a liquid or oily form, which gradually becomes dark and hard with age. When fresh it makes an excellent varnish. As Piney Dammar, some of it comes to China, and the harder sorts as Copal, or Gum Animi, are used in caulking ships. Dr. WILLIAMS says "There is a hard sort, found in big lumps under the trees, or on their trunks, in large quantities. It is mixed with a softer kind to make it less brittle. It is brought to China in native vessels." No use is known to be made of this balsamic substance, which might be used in making plasters for rheumatism. See *Dammar* and *Canarium*.

**COPPER.**—銅 (*Tʻung*), 赤銅 (*Chʻih-tʻung*), 赤金 (*Chʻih-kin*).—The word *Tʻung*, used for copper is said to be intended to denote its close relation to gold which is sometime's spoken of as red, like copper. It may also refer to the frequent amalgamation of these two metals in the making of ornaments and coins. Ning-kwoh fu, Tai-ping-fu (Nganhwui) Yen-ping fu (Fuhkien), Ching-tu fu, Ning-yuen fu, Chung-king fu, Tung-chuen fu (Sechʻuen), Kwang-chau fu, Lien chau, Shau-chau fu, Kia-ying chau, Shau-king fu (Canton), Kwei-lin fu (Kwangsi) Ching-kiang fu, Yung-peh-ting, Tung-chuen fu (Yunnan), Tai-yuen fu, Kiái chau (Shansi), and Si-ngan fu (Shensi) yield copper, according to the Chinese at the present time. Wu-chang fu in Hupeh does not appear to yield any at present, although formerly the mines at Peh-man produced large quantities. The sulphuret and carbonate are the principal ores. A mineral said to produce brass 黃銅 (*Hwang-tʻung*), by smelting with calamine, is called 自然銅 (*Tsze-jen-tʻung*), or "native copper." The substance called by this name at the present day is a peroxide of iron. Alloys of copper are very numerous. Argentan or white copper 白銅 (*Peh-tʻung*), contains copper, zinc, arsenic and nickel. False argentan 假白銅 (*Kia-peh-tʻung*), is copper and tin, or nickel. Gong-metal 響銅 (*Hiang-tʻung*), or tutenague 山銅 (*Shan-t'ung*), is made by melting copper with tin and zinc. Many useful domestic articles are made of these alloys, which are very various in their composition, and should be very cautiously employed in the preparation of food or drink, as they often contain arsenic or antimony. Copper is not used in medicine, but old copper cash, ancient copper vessels, and copper ore are directed in the *Pen Ts'au* to be used in the treatment of diseases of the eye, of the skin, and of a host of disorders, of which the most intelligible is the internal employment of a kind of Vinum Cupri in dysentery, in chlorosis, and other diseases. It is rather the verdigris, naturally or artificially produced, which is actually employed in these cases.

**COPPER, NATIVE.**—自然銅 (*Tsze-jen-túng*).—This substance erroneously supposed by the Chinese to be a native copper, as the characters signify, is a native peroxide of iron, as now met with.

**COPPER, OXIDE OF.**—銅落 (*Túng-loh.*)—Black oxide of copper in scales, produced by heating the metal, is used in the preparation of a Vinum Cupri, answering, to the Vinum Ferri of European pharmacopœias. The Chinese have just the opposite view of our own on the relation of the two metals, iron and copper, to the human constitution. They consider copper to be the more friendly and wholesome, and therefore medicines and food for the sick are always directed to be cut, served, and cooked with copper articles rather than with iron vessels. Oxide of copper and nut-galls are used to dye the whiskers and hair of a deeper colour, if needed. Copper from Japan, met with in bars six inches long and four or five pounds in weight, is of a cinnabar-red colour, which is said to be due to a pellicle of protoxide of copper? What is commonly called 紅銅 (*Hung-túng*), or "red copper" is not an oxide of copper, but an arsenide of nickel, of a yellowish-red colour, sometimes containing antimony.

**COPPER, ACETATE OF.**—銅青 *Túng-ts'ing.*—See *Verdigris.*

**COPPER, CARBONATE OF.**—綠鹽 (*Luh-yen*), 銅綠 (*Túng-luh*).—This is the name of a natural carbonate of copper, said to come from Persia, and from Kharashar. It is very costly, and in high repute as an ophthalmic remedy. See *Malachite and Verditer.* What is called (*Nau-sha*) or Sal Ammoniac, a greenish kind of common salt, as it is in many cases, would appear to go by this name of "green salt," and with great propriety.

**COPPER, SULPHATE OF.**—石膽 (*Shih-tan*), 膽礬 (*Tan-fan*), 銅勒 (*Túng-loh*).—There is some doubt as to the point whether or not the Chinese salt, commonly supposed to be a cupreous sulphate, is really a salt of copper at all. No genuine sample of blue copperas has been met with, the sulphate of iron, highly purified, being always furnished and described as *Tan-fan*. Certain ores of copper are evidently confounded with this artificial salt. Yü-hiang hien in Shansi, Tsin chau in Kansuh, Yuen-shan hien in Kiangsi, and other places are said to yeld something called *Shih tan*. An ore of this kind is directed to be treated with sulphate of soda and crytallized. Emetic, astringent, vulnerary, escharotic and alexipharmic properties are attributed to this salt. It is applied as a powder to buboes, bad eyes, sores, and the bite of a mad dog. On the whole the Chinese have thoroughly appreciated this powerful drug, which is still in general and effective use. They understand and occasionally make the use of it as an emetic in cases of opium-poisoning. This salt has an excellent effect when used as a wash for the sores of lepers.

**COPPER, WHITE.**—白銅 (*Peh-tʻung*).—This is the Argentan or German Silver of Europe, containing nickel, zinc and copper, with a portion of arsenic. There is an ore called *Peh-tʻung*, which is brought from Yung-chang fu in Yuman, and is an ingredient in the alloy called by foreigners Argentan. What the composition of this ore is, if it be a natural mineral, is not known. It possibly contains antimony, which certainly appears in these pewter alloys. See *Argentan*

**COPPERAS.**—青礬 (*Tʻsing-fan*).—This term is commonly applied to an impure sulphate of iron, obtained by roasting iron pyrites as described under Sulphate of Iron. *Tʻsing-fan*, in Chinese works, is said to come from Tung-yang fu, in Nganhwui, Hang-chau fu in Hunan, and from Tai-yuen fu, and Ping-ting chau, in Shansi. Sulphate of copper is sometimes called blue copperas, and with much more propriety.

**CORCHORUS CAPSULARIS.**—火麻 (*Ho-ma*), 大麻 (*Ta-ma*).—This Tiliaceous plant is apparently confounded with species of Cannabis. The Shanghai delegates, who give *Peh-tsze-tow* as a synonyme of this plant, report it to be grown in Wan-kiang hien, in Ching-tu fu (Sechʻuen). It is not known to be used in medicine, as distinguished from the Cannabis.

**CORCHORUS PYIRFORMIS.**—棠棣 (*Tʻang-ti*).—Dr. MORRISON, gives this as the name of the Chino-Japanese species of Corchorus (Tiliaceæ), which with Triumfetta, another Tiliaceous plant, yields the hemp-fibre called *Po-lo-ma*. The fruit resembles that of the genus Pyrus, for which *Tang* seems to stand, in part, in Chinese botany.

**CORDYCEPS SINENSIS.**—夏草冬蟲 (*Hia-tsʻau-tung-chʻung*).—This fungus, the Sphæria of some writers, described by the Chinese as a plant in summer, and in winter an insect, grows upon the head of a caterpillar, as a disease of the insect. It is said to be common in southern Thibet, but the present supply comes from Kia-ting fu in Sechʻuen. It is not so rare nor so much thought of as in the days of DUHALDE, who praises it immoderately. It belongs to the class of drugs called 冷淡貨 (*Lang-tan-ho*), or things uncommon, but not in any demand. It is sold in bundles weighing two mace (116 grains troy) each, on an average. The bundles are three-quarters of an inch in diameter, and from three to three-and-a half inches in length. Each of the many pieces forming the bundles consists of two distinct portions, one which is larger, belonging to the insect, of a yellowish brown colour, more than an inch long, showing the rings, joints and more or less of the characteristic structure of the grub, and the upper fungous portion, consisting of a spurred filament of a greyish-brown colour, flexible, more or less twisted, and internally of a light colour. The insect is probably a species of Hepialus, of the moth-tribe. No account of this fungus is found in the *Pen Tsʻau*. It is said by DUHALDE to be found in the province of Hukwang, answering to Hupeh and Hunan of the present time. It is reported to be as good as Ginseng, and to be worth four times its weight of silver. It is used in jaundice, phthisis and in cases of injury of any serious nature. Very few persons know much about it at the present time.

**CORIANDER.**—蘿蒔 (*Shi-lo*), 小茴香 (*Siau-hwei-hiang*).—The globular, brown mericarps of this unbelliferous plant are occasionlly met with in samples sold as *Siau-hwui-hiang*, and are used in the same way as fennel-fruits.

**CORK-TREE.**—杋 樹 (*Fan-shü*).—The tree known by this name is said to have a bark resembling that of Quercus Suber. The bark is called 水桴木 (*Shwui-fau-muh*), but has never been met with. The Chinese make only very small toy-bottles, which need no corks. Foreign corks are called in Hankow, 束 子 (*Shuh-tsze*).

**CORNUS OFFICINALIS.**—山茱萸 (*Shan-chă-yü*).—This Cornelian cherry is brought from Kiangsu, Shensi and Shantung, and is met with in Japan. The shrub is prickled and the flowers white. The red drupes are sold in the dried state, have a sub-acid taste, and contain a good deal of oil, which seems to have escaped the attention of the Chinese. This oil may be expressed, and used as lamp-oil, or for any other purpose. It is contained in cells surrounding the albumen. The fruit, spoken of sometimes by the Chinese as 肉棗 (*Jau-tsau*). or the "fleshy date," is suppused to have tonic and astringent properties. The bark of some of these Cornels has decided power over intermittent fevers, but the Chinese do not seem to have tried it.

**CORNUS SINENSIS.**—胡頹子 (*Hu-t'ui-tsz'*).—This tree, with its slender, supple, branches, long pointed leaves, downy on the under surface, and white flowers, resembles the Cornus mascula to some extent, but deserves the distinction of a a separate species. Its fruits are marked with eight ribs, and are much less stony than the drupes of Cornus officinalis. They are used with the root as astringents. The leaves are prescribed in coughs and asthma.

**CORROSIVE SUBLIMATE.**—白降丹 (*Peh-kiang-tan*), 白降 (*Peh-kiang*).—This substance should be "white precipitate," which is a literal translation of the ordinary name. TATARINOV speaks of it as 青粉 (*Ts'ing-fen*), a name not met with here, or in Chinese books, and probably a mistake for *K'ing-fen* which is Calomel. It is made by the Hankow native chemists from mercury, nitre, borax, sal ammoniac, orpiment, cinnabar and massicot. The massicot (monoxide of lead) and the orpiment are added on medical grounds, to neutralize the injurious tendency of the mercury. The Chinese, ignorant of the properties of lead, imagine that the massicot goes over with the mercury. Many substances are found in these compounds, which have no chemical brittle, crystalline masses, smooth on one surface from the impression of the pan in which it is sublimed and deposited, in precisely the same way as calomel is made. This drug is highly poisonous, and contains arsenic as a rule, with other impurities, It is never used internally, but is constantly used as an escharotic or detergent application to buboes syphilitsic sores, and occasionally to indolent ulcers. It is obvious that some of this mercurial preparation when applied for instance to a chancre on the penis, must be absorbed.

**CORUNDUM.**— 金剛石 (*Kin-kang-shih.*)—A kind of adamantine spar is as likely to be the substance known to the Chinese under this name, which is generally assumed to refer to the diamond. Corundum crystallizes in six-sided prisms, but the Chinese siliceous stone is said to be octohedral in its form. Blackish emery, containing iron, is also described under this heading in the *Pen Ts'au.* Cambodia, India, Asia Minor, the country of the Hwui-k'i (Turkic tribes), and other countries of Asia, are said to possess this stone. The Chinese samples are aid to fuse with litharge,so that they are, probably, silicate of alumina. Extraordinary stories are told of a stone called 昆吾石 (*Kwan-wu-shih*), large enough to be made into a knife, very brilliant, and able to cut gems with ease. The prefecture of Shun-ning, in Yunnan province yields the present supply of corundum used in cutting gems. This stone is said to be worn in the girdle as a charm or prophylactic. The powder is recommended as an application to scalds and burns.

**CORYDALIS AMBIGUA.**—延胡索 (*Yen-hu-soh*), 玄胡索 (*Hiuen-hu-soh*).—The tubers of this Fumariaceous plant are met with as small firm brownish-yellow, flattened pellets with a depression on one of the surfaces, giving them some sort of general resemblance to the, *Pwan-hia* (Pinellia tuberifera) tubers. They are from four to six lines in diameter, and are marked externally with wrinkles, or reticulations. When broken they present a horny, semi-translucent, yellow or greenish appearance. The flavour is bitterish, and bean-like. Siberia, the country of the Amur, and the district of Ngan-tung, in Kiangsu, produce this root. The Corydalis Goviana of India, and doubtless this species also, contains, according to Sir W. B. O'SHAUGHNESSY, a pearly, crystalline principle called Corydalia, soluble in acids, and intensely bitter. Acrid, diuretic, emmenagogue, deobstruent, astringent, alterative and sedative properties are attributed to these tubers, which enter into the composition of many formulæ prescribed for deficient lochia. It is given in hœmaturia and in other bloody fluxes. The active principle is suggested in the Pharmacopœia of India as an antiperiodic, and by presumption the tubers might be inferred to have some such properties. The positive identification of the Chinese drug as the product of this species is due to HANBURY, a most indefatigable observer.

**COSMETIC POWDER.**—樸粉 (*Puh-fen*), 冰麝宮粉 (*P'ing-shié-kung-fen*), 水粉 (*Shwui-fen*), 芙蓉粉 (*Fu-yung-fen*).—These are the most common names in local use for the dusting-powders used by Chinese women for toilet and medical purposes. The shells of several molluscs are washed, scraped, calcined and levigated, and certain scenting ingredients such as musk 麝香 (*Shie-hiung*), are added. The addition of Borneo Camphor makes some of these powders exquisitely cooling to the skin, especially when threatened with "prickly heat." The powdered musk-seeds, or those of the Okro, indicated by the name *Fu-yung*, are also added sometimes. The *Shwui-fen* is so called, because water is used in laying it on the face. See *Calcined Shells and Haliotis.*

**COTTON BANDAGES.**—布條子 (*Pu-tiau-tsze*).—Bandages are not much used by the Chinese surgeons, except in their rude apparatus for retaining fractures. Newly born children, young women's feet, and the legs of braves and coolies are regularly bandaged to preserve the normal or some artificial shape, or to steady the tendons of the leg. Chinese cotton-cloth is too dear and too coarse for use in Mission Hospitals. It marks the skin, and is much less serviceable than the common calico of the foreign market, which is much cheaper as a rule.

**COTTON PLANT.**—木綿 (*Muh-mien*), 古貝 (*Ku-pei*), 古終 (*Ku-ching*).—The Malvaceous species Gossypium herbaceum and G. religosum which yield the cotton-wool, are not carefully distinquished in Chinese writings from the Bombax ceiba (Sterculiaceæ), the Cotton tree. From the resarches of Mr. W. F. MAYERS it appears that the cotton plant was known in South China in the 11th century, but was only cultivated to any extent during the Mongol domination. It may be that the use of this important staple was introduced by way of the southern sea by foreigners trading with the Chinese, as well as by the Mongol usurpers coming in from the north-west. It grows all over China at the present time. The 紫花 (*Tsz‘-hwa*), is the name of the Nanking variety, 江花 (*Kiang-hwa*), that of the plant growing in Central China, 北花 (*Peh-hwa*), the cotton-plant of Shantung and Pehchihli, and 浙花 (*Cheh-hwa*) that of the province of Chehkiang, which supplies a good deal of cotton. The *Pen Ts‘au* gives 睒婆 (*San-p‘o*), or 迦羅婆劫 (*Kia-lo-p‘o-kieh*), as the Sanscrit names, the first of which hardly agrees with the Indian name *Karpasi* usually given in books. Kau-chang, the country of the Uigurs is named as possessing a cotton-plant, producing a textile fibre called 白疊 (*Peh-tieh*). The cotton plant is not known to be used medicinally. Oil is expressed from the seeds. See *Oil of Cotton seeds.*

**COTTON TREE.**—木綿 (*Muh-mien*), 斑枝花 (*Pan-chi-hwa*)—There is a most unnecessary confusion, even in the pages of the *Pen Ts‘au*, between this Sterculiaceous tree, the Bombax ceiba of botanists and the cotton plant. It is a splendid tree, with a red flower like that of the Camellia. The large fruit has a white silky down covering the seeds, which may be used to stuff cushions, and is said to be capable of being worked up into cloth of a rough description. There is some doubt about this latter fact, as the fibres will not felt. Changteh fu in Honan furnishes the tree for any medicinal purposes to which it may be applied. The hairy down is said to be burnt, and the ashes given in menorrhagia, and to staunch blood from wounds. The Bombax Malabaricum of India is held in some repute by the natives, without, sufficient reason according to Dr. WARING. The bark is said to be emetic.

**COTTON-WOOL.**—飛花絨 (*Fi-hwa-jung*), 綿花絨 (*Mien-hwa-jung*) 絲綿 (*Sz-mien*).—The Chinese card cotton by means of a bow, producing a very light floss. The *Fi-hwa-jung* is the lightest sort. Rough cotton-wool can be purchased very readily to be used as a substitute for the abominable sponge, so dangerous as a conveyance of infectious poisons. *Sz-mien* is a very silky staple, of great length. The Chinese make clothing for the winter, warmer than flannel; bed-clothes, not to be despised; and knee-pads, and coverings for rheumatic joints, in a very simple manner. They consider the foreign cotton which they have had to buy so largely of late years, from the failure of their own crops, to be not so warm as their own staples. The treatment of burns with cotton-wool is not very successful in China.

**COTYLEDON SERRATA.**—刀傷藥 (*Tau-shang-yoh*),—The Chinese name of this Saxifrage denotes its use as a styptic and vulnerary remedy, employed by native surgeons, although it is not officinal. The leaves are applied to cuts. The plants of this genus of which there are two or three varieties in China, have been elsewhere successfully employed in epilepsy. The juice of C. spinosa is used to dress and dye women's hair, and to prevent baldness.

**COW BEZOAR.**—牛黃 (*Niu-hwang*), 丑寶 (*Ch‘au-pau*).—The concretion found in the gall-bladder of the cow, as in that of the goat, antelope, and the ruminant or other domestic animals, are alone to be properly called Bezoar. These stones are really biliary calculi, consisting in greatest part of a peculiar crystallizable principle, called lithofellic acid, the formula of which is 20 C 36 H 4 O. The camel produces a Bezoar-stone (駱駝黃) which is used to adulterate the Cow Bezoar, which is sold at a ridiculously high price. The Dog Bezoar 狗寶 (*Kau-pau*), is believed to be a a cardiac calculus, although both biliary and renal calculi are evidently included under this term of *Kau-pau*. A similar concretion in the horse is called 馬墨 (*Ma-meh*). A general term for these calculi in all quadrupeds is 鮓荅 (*Chá-tah*). This latter is said to be used by the Mongols and others in certain prayers and incantations to bring down rain. All these concretions are understood to be the result of disease. 瞿盧折娜 (*K‘ü-lú-cheh-lo*), is the Sanscrit name apparently transferred into Chinese. Dr. Williams is hardly correct in saying that the name *Niu-hwang* is applied to them all. The cow sometimes vomits these concretions, which fact explains their presence in the stomachs of slain animals, with which organ however they have nothing to do. These Cow Bezoar-stones are globular or ovoid, of a yellow colour, have a concentric structure, and are not very heavy. They are frequently adulterated. Dr. Williams says that "the genuine throws off only a small scale when a hot needle is thrust into it, and in hot water it remains unchanged." It should leave a deep yellow stain, when rubbed upon the finger-nail Part of the supply comes from India, but Lai chau, Tang-chau fu and Ts‘ing-chau fu in Shangtung, Yunnan fu in Yunnan, Kau-chau fu in Canton, Ya-chau fu, Ching-tu fu in Sech‘uen, and other places supply this drug, according to native official returns. It is generally given in the chorea of children, in bad small pox with petechiœ, and in delirium, insanity, tetanus, apoplexy, palsy and aphonia. It is supposed to act as a sedative and tonic, and was formerly given to newborn children as a charm or prophylactic. It is not used as a paint in Central China, as Dr. Williams asserts for the South, as it is manifestly too dear.

**CRABS, FOSSIL.**—石蟹 (*Shih-hiái*).—Several species of fossil crabs of the Post-Tertiary Period, such as the Macropthalmus Latreilli, and living, or very recently extinct, species of Cancer, such as Portunus leucodon, are met with in the district of Yai chau, on the island of Hainan, and upon the adjacent mainland of Kwangtung province. Hanbury in his "Notes" says that there are specimens in the British Museum showing that very similar species, such as the Macropthalmus serratus, are still to be found in Chinese seas. The Portunus crab would appear, from the observations of French naturalists, to be much larger than the ordinary specimens, which consist of portions of clams, or broken fossil fragments of the carapace, of a grey colour, and very heavy. These fossil fragments are crushed, powdered and finely levigated, to be used in opacities and other affections of the eye. The drug is said to excite uterine action when taken internally, so as to produce abortion, or quicken labour. It is also said to be anthelmintic and alexipharmic, neutralizing all mineral, metallic and vegetable poisons. See *Hanbury's Notes on Chinese Materia Medica. p.*43.

**CRAICÆGUS BIBUS.**—枇杷葉 (*P‘i p‘a-yeh*).—Tatarinov gives this as the name of a species of white thorn, the leaves of which are said to be officinal. Such a medicine is not known here. The name *P‘i-p‘a* is assigned in Chinese works to Eriobotrya Japonica, which see.

**CRATAEGUS PINNATIFIDA.**—山樝 (*Shan-chá*), 茅樝 (*Mau-chá*).—The largish, red pomes of this Rosaceous mountain shrub resembles the haws of the whitethorn. They are fleshy and sour, and the favourite food of wild aminals on the hills. They are strung as beads by the Chinese children, to whom they are given in the dried, crushed state as a peptic remedy. The *Mau-chá* is a smaller variety, much resembling the fruit of Cratægus oxyacantha. Antiscorbutic, laxative, stomachic, deobstruent, and alterative properties are ascribed to the fruits, which must be very harmless in their effects. They are also given in the *Kan* disease of pot-bellied children, in diarrhœa, scrotal hernia and hydrocele, and in lumbago.

**CREAM.**—酪 湩 (*Lah*), (*Tung*).—The milk of camels, cows, sheep, mares, buffaloes, and asses is all used in China, as most residents in China know to their cost. The cream from buffaloes' milk is very thick, but of a strong flavour in most cases. Cream is said to be known better in the north of China. A sort of preserved milk is described in the *Pen Ts'au*, where butter and cream, although described separately, are confused to some extent. Cooling, demulcent, lenitive, and lubricating properties are referred to this domestic article, of which little is known in Hupeh at the present time. It is applied to erruptions of various kinds as an ointment.

**CREAM OF TARTAR.**—酒 桶 巴 (*Tsiu-t'ung-pa*).—No reference, beyond a mere hint in the *Pen Ts'au* of the existence of some such deposit, has been found in Chinese works to this substance, an impure acid tartrate of potash, called argol in the crude state, as deposited from grape-juice in the act of fermentation. It is subsequently purified by solution, decolorization by means of pipe-clay and animal charcoal, and subsequent crystallization. Wine containing this argol, or the argol itself is said by *Li Shi-chin* to be very injurious. The name given here is coined, meaning " wine-cask crust."

**CREOSOTE.**—固 肌 油 (*Kú-ki-yú*).—Nothing is as yet, of course, known by the Chinese of this substance, which is to a great extent nothing but carbolic acid. The name here brought forward for use refers to the remarkable power of this substance to preserve meat. The Chinese very commonly use wood-smoke, which contains this substance, to dry and flavour their preserved meat. This process is called 秋 (*Ts'iu*).

**CRINUM SINENSIS.**—文 樹 蘭 (*Wan-shü-lan*).—This beautiful plant (Amaryllidaceæ) or an allied species the Crinum Toxicarium, is confounded by the Chinese with Orchidaceous plants, and has not been met with in the *Pen Ts'au* as a distinct plant. It is cultivated in China and India, and is met with in Cochin China, the Moluccas, and in Ceylon. Four or five species are said by Burnett to be found in China. In India the bulbous root, which has a terminal, stoloniferous, fusiform portion issuing from the crown of the bulb, as described by Dr. WARING, has an unpleasant narcotic odour. It is there used in fresh slices as an emetic and diaphoretic, or the root is carefully dried, and reduced to powder as a substitute for squills or ipecacuanha. It is said to contain a principle analogous to scilitine, the active chemical ingredient of the Scilla maritima, not met with in the East, so far as known. Dr. WARING bears testimony to the efficiency of this drug. China is singularly deficient in known drugs of the class of safe emetic and diaphoretic, or emetic and diuretic drugs, as represented by ipecacuanha and squills respectively. This name is given on the authority of Dr MORRISON.

**CROCUS SATIVUS.**—番 紅 花 (*Fan-hung-hwa*).—See *Saffron*.

**CROCUS THIBETANUS.**—藏紅花 (*Tsang-hung-hwa*).—A kind of saffron mentioned by Tatarinov in his list of drugs as coming from Thibet. It is not known in this market.

**CROTON SEEDS.**—巴豆 (*Pa-tau*).—Croton oblongifolium, Croton Pavanum and Croton Tiglium are all met with in China, Burmah, India and the Indian Archipelago. The character *Pa* refers to Sechʻuen, the province from which the drug is procured in great part. Kia-ting-fu, Mei chau and other places in Sechʻuen appear to yield the present supply. Several species or varieties are described in the *Pen Tsʻau*. The seeds, or rather fruits, resemble those of the Gynocardia odorata. They are oblong, obscurely triangular, about three quarters of an inch long, three-celled, and of a yellowish-brown colour. Each cell contains an oval, flattened, or imperfectly quadrangular seed, resembling a coffee-seed. The dark brown testa encloses the yellowish albumen, within which is the large dicotyledonous embryo, often much shrunken. The taste is very acrid. Highly drastic and poisonous properties reside in this Euphorbiaceous fruit, every part of which is officinal amongst the Chinese. A single decorticated seed was formerly prescribed in dysentery and diarrhœa as a revulsive remedy. Ranula, apoplexy, paralysis, toothache, obstinate constipation and affections of the throat are samples of the diseases in which this drug is recommended. Cases of poisoning are sometimes treated by the use of the seeds in a coarse powder. See *Oil of Croton-seeds.*

**CUBEBS.**—畢澄茄 (*Pih-ch'ing-kiá*).—The true cubeb, the Cubeba officinalis of botanists, has probably been introduced from Sumatra or Java into the provice of Canton. No sample of the drug has been met with here, but the description in the *Pen Ts'au*, which compares the berries to these of the Vitex incisa, than which they are said to be a little larger, leaves no doubt that the cubeb has been used in China. The *Daphnidium Cubeba*, included under this same name perhaps, has come more into use. Cubebs would seem to have been formerly exported to India. There is a 山胡椒 (*San-hu-tsiáu*), appended to the notice in the *Pen Ts'au*, which may stand for the officinal cubeb. See *Daphnidium Cubeba.*

**CUCUMIS.**—越瓜 (*Yueh-kwa*), 稍瓜 (*Shau-kwa*).—A kind of cucumber, eaten raw by the Chinese in summer, goes by this name. It is about a foot long, has a dark green skin, and is marked by longitudinal, pale stripes. The taste is sweet, and indicates its relation to the Cucumis melo. This is perhaps the 小瓜 (*Siau-kwa*), of Tatarinov.

**CUCUMIS LONGA.**—絲瓜 (*Szʻ-kwa*), 蠻瓜 (*Man-kwa*).—Tatarinov gives this as the name of the Egg-plant, but here it refers to a species of Cucumis which creeps by means of its long threadlike tendrils, and covers trees and bushes of all kinds. Its fruit is sometimes a yard long, when cultivated, and is marked by ribs which run the whole length of the deep-green scabrous surface. When old, the internal vascular fibres of the fruit may be dried and used as shoe-strings, or as a sponge to wipe crockery with. The juice of the leaves was formerly used as a dye. The cicada is very fond of feeding on the flowers. The fruit is much used as a vegetable in Hupeh. Several prescriptions in the *Pen Ts'au* attest the value formerly placed upon it as an anthelmintic, alterative, galactagogue and general remedy given in smallpox and a great variety of diseases.

**CUCUMIS MELO.**—甜瓜 (*T'ien-kwa*), 香瓜 (*Hiang-kwa*).—Several varieties of the melon are met with in China. The fruit is less juicy, and more mealy, as generally sold in Hankow, than the exquisite fruit of Portugal and other countries. Cooling, diuretic and slightly deleterious qualities are attributed to it. The seeds are also officinal, and are said to yield an oil.

**CUCUMIS MELO.**—胡 瓜 (*Hu-kwa*), 黃 瓜 (*Hwang-kwa*).—Chang K'ien, the noted legate of the Han dynasty, seems to have brought this "foreign cucumber," from Central Asia to China. It is largely cultivated and eaten both raw and as a pickle. Its leaves and root are credited with medicinal properties, but the most sensible use of the plant is to make a kind of cucumber-salve from the fruit, which is a very capital application to eczematous eruptions, or to burns and scalds. Care should be taken in eating this vegetable which causes, in some exceptional cases, very severe diarrhœa.

**CUCURBITA PEPO.**—冬 瓜 (*Tung-kwa*), 白 瓜 (*Peh-kwa*).—The Chinese pumpkin, the Benincasa cerifera, or Tallow-gourd of some writers, attains an immense size in the hands of Chinese cultivators. From its weight the fruit generally assumes a flattened form. The surface is covered with a thick white waxy bloom, especially in the case of the large ones. This gives it the name of *Peh-kwa*, or "white gourd," just as the fact that it grows best when sown towards the end of the year has induced the Chinese to call it *Tung-kwa*, or "winter-gourd." The seeds 白 瓜 子 (*Peh-kwa-tsze*), are eaten as a dessert with tea, and are said to be vulnerary, demulcent and cosmetic in their properties. They have been lately highly recommended by American and Anglo-Indian physicians as an anthelmintic remedy in tapeworm. Two ounces of the fresh decorticated seeds, are given with honey or sugar, or in the form of an emulsion in the morning fasting, followed in an hour or two by a dose of castor-oil. The seeds contain an oil, which may be expressed and used as an anthelmintic. Slices of the gourd make a very soothing application to be laid on eczematous eruptions, inflamed joints, or inflamed eyes. This gourd is one of the most whole some of its class.

**CUCURBITA MELO-PEPO.**—南 瓜 (*Nan-kwa*), 京 瓜 (*King-kwa*)—The southern or foreign origin of this large, round, red-fleshed gourd is indicated by its name *Nan-kwa*, "southern gourd." Its flesh when cooked resembles that of the Swedish turnip. These gourds may be kept in a warm dry place for many months. They are presented with great ceremony to married, childless women on the evening of the festival of mid-autumn, which happens on the fifteenth of the eighth month of the Chinese year. A similar custom prevails in India, according to Ainslie, who says that the white, or Tallow-gourd is presented to the married pair at their wedding-feast to insure prosperity. The seeds of this gourd are anthelmintic, but are scarcely known to the Chinese as a medicine.

**CUCURBITA AURANTIA.**—陰 瓜 (*Yin-kwa*)—A gourd grown in Chehkiang, having a deep golden colour and a thickish rind, is probably the Orange-gourd of European botanists. Its grows best in shady places, as the Chinese name would indicate.

**CUDBEAR.**—紫 粉 (*Tsze-fen*), 石 蕊 (*Shih-jui*).—Cudbear, or "carnation powder," the dried, thick, warty, dirty-white crusts of certain Lichens is said by Dr. WILLIAMS to be imported into China, to some extent, from Europe, for use as a dye. See *Lecanora* and *Litmus*.

**CUNNINGHAMIA EXCELSA**.—杉樹 (*Shan-shü*)—See *Fir*, and *Pine*.

**CUSCUTA**.—菟絲子 (*Tʻu-szʻ-tsze*).—See *Dodder*.

**CUSTARD APPLE**.—番荔枝 (*Fan-lih-chi*).—The delicious fruit of the Anona squamosa has been introduced into China, Cochin China, India and other places in Asia for more than a hundred years at least. The leaves have an unpleasant smell, and are velvety underneath. It is a true native, according to Dr. HANCE, of the West Indies, and of Brazil. *Pu-wan-shü* is a name given in foreign works, but it has not been met with under this or any other name in the *Pen Ts'au*. This renders CRAWFURD's statement that it was known in China in the sixteenth century very doubtful. The seeds are said by LINDLEY to be insecticide, but the tree is not met with in Central China, so that nothing is known of its properties here.

**CUTCH**.—孩兒茶 (*Hai-rh-ch'á*), 洋茶 (*Yang-ch'á*).—See *Catechu*. The name *Yang-chá*, "foreigntea," refers to the idea that this drug is made from rotten tea-dust.

**CUTTLE-FISH**.—烏賊魚 (*Wu-tʻsih-yü*), 墨魚 (*Meh-yü*).—The Sepia, with its eight suckers and two long tentacula is supposed by the Chinese to be a bird transformed. The "black pirate fish," as the Chinese name signifies, is met with all along the coast of China. Ningpo, and Wan-chau fu, in Chehkiang supply it in large quantities as an article of diet, or as a medicine. There is a legend to the effect that TSʻIN CHI-HWANG having dropped his writing-case into the Eastern Sea, it became this "inky fish!" A species of dibranchiate cephalopod, with eight arms, is called 柔魚 (*Jau-yü*). The flesh is eaten as a pickle, or dried, and is said to be tonic and emmenagogue.

**CUTTLE-FISH BONE**.—海螵蛸 (*Hai-pʻiau-siu*).—The boat-shaped bones of the cuttle-fish are met with in light, white pieces, three or four inches long, one to one-and-a-half inches wide, and from five to seven lines thick. These bones were formerly engraved, or inlaid, and used as ornaments. It is said to be astringent, styptic, alterative and anthelmintic. See *Pounce*.

**CYCLAMEN**.—海芋 (*Hai-yü*).—The large acrid root of this species of Sowbread, which is dedicated to the Goddess *Kwan-yin*, is esteemed as very poisonous. It is recommended as beneficial in pestilential or seasonal diseases, and as a discutient remedy for swellings.

**CYDONIA JAPONCA**.—海紅 (*Hai-hung*), 海棠梨 (*Hai-tʻang-li*).—A monograph entitled *Hai-tʻang-pu*, was published in 1259 by CHʻIN-SZE on this beautiful flowering tree, which originally come from Sin-lo, a foreign country in the Yellow Sea. Sechʻuen has produced very fine sorts. Mei chau and Ching-tu fu, in the latter province, supply the tree at present. A variety called 秋海棠 *Tsʻiu-hai-tʻang* is brought from Kia-ting fu (Sechʻuen). The pale red flower produces drupes smaller, but similar to the quince. The seeds are demulcent and are used in diarrhœa.

**CYPERUS ESCULENTUS**.—莎草 (*Sha-tsʻau*), 香附子 (*Hiang-fu-tsze*).—This sedge-plant, with species of Carex and Scirpus, is used to make hats and matting. Its small, dark, hairy tubers have a strong smell, and are in as much request in China as those of C. Rotundus in India. Kwei-teh fu, in Hunan partly supplies the druggists. Stimulant, tonic, stomachic, sedative, astringent and other properties are believed by the Chinese to reside in the roots. The flowers and shoots are also officinal. Cholera is said to have been benefitted in India and China by the use of this and the next species, which resemble the Acorus Calamus in their properties.

**CYPERUS ROTUNDUS**:—荆三稜 (*King-san-ling*), 草三稜 (*Ts'au-san-ling*).—The plant which yields this roots is met with in Honan, Hupeh, Sech'uen and Shensi provinces. The fibres are used for textile purposes. The tubers are top-shaped, pointed at one end and hard, and have, apparently, been cut and trimmed with a knife to separate them from the running root which connects them together in the growing state. The Chinese name *San-ling* indicates the "triangular" shape which these tubers obscurely exhibit in some samples. The internal texture is hard, yellowish and woody. The taste and smell are aromatic to some extent. Emmenagogue, galactagogue, stomachic, tonic, deobstruent and vulnerary qualities are assumed to reside in this comparatively inert root, which is far inferior to the Cyperus esculentus in medicinal properties.

**CYPRESS.**—扁柏 (*Pien-peh*).—Dr. WILLIAMS sets this down as the Cupressus thyoidea. The name *peh* is commonly applied by the Chinese to the Cupressinœ, and to some of the Conifers of the genus Abies, having their leaves in the same plane, as distinquished from the Junipers, whose leaves are spreading. The leaves, resin, and wood of these trees are esteemed to be astringent, arthritic and lenitive.

## D

**DAMMAR.**—吧嗎油 (*Pa-ma-yu*), 欖糖 (*Lan-t'ang*).—This Malay name is applied to a large variety of substances, such as the India Copal, or Gum Animi, the New Zealand Copal, yielded by Dammara australis, the hard brittle resin of the Dammara amboyna, the brownish Dammar of Bengal, the product of Shorea robustea (娑羅 *So-lo*), and the Black Dammar, or Dammar Pitch yielded by Vatica Tumbugaia, and certain species of Canarium, 橄欖 (*Ken-lan*). Dammar is imported into China from Borneo, the Straits, and, indirectly, from India for the purpose of paying seams in boats. It is not known to be used in medicine, although as Dhoona it is held in some repute as a gum-resin. The Chinese Dammar, *Lan-t'ang*, is made by heating the natural exudation of the Canarium Pimela, with the leaves and bark of the tree, so as to produce a tarry mass for use in caulking boats. A purer resin, answering to the Black Dammar described by Dr. WARING in the Pharm. Ind., is called 欖香 (*Lan-hiang*), and answers to the Elemi of commerce.

**DANDELION.**—蒲公英 (*P'u-kung-ying*).—The globular, pappose fruit and milky herbage of this familiar Composite plant are noticed in the *Pen Ts'au*. Its tendency to spread is spoken of, but it is said to be not found further south then the Mei-ling hills. Its tender shoots are eaten. A reddish-flowered variety is spoken of. The plant is referred by BURNETT to Leontodon Chinense, and by TATARINOV to L. Taraxacum. Tonic, longevous and discutient properties are referred to this plant in the *Pen Ts'au*, but nothing is said of any diuretic effects. It is principally used, both topically and internally, to disperse swellings, and is applied to bad teeth and snake bites.

**DAPHNIDIUM CUBEBA.**—畢澄茄 (*Pih-ch'ing-kiá*).—Two drugs are evidently named, and exported from China as *Pih-ch'ing-kia*. On this point see HANBURY's "Notes." p. 25., and the article *Cubeb* in this work. The Daphnidium, or Laurus Cubeba, first described by LOUREIRO as a native of Cochin China, is generally understood to be of foreign origin, but now growing in the South of China. Its fruit is officinal in the form of small, one-seeded, globular berries, sometimes pedicellated, with the surface of the dry pericarp finely reticulated. The seed being stripped of its brown testa, reveals the hemispherical, oily cotyledons. The odour is agreeable and the taste warm, aromatic, and bitterish. Carminative, peptic, stomachic, tonic, and expectorant qualities are reported to reside in the fruit, which is given in cystic, bronchitic, dyspeptic, and choleraic affections. HANBURY quotes LOUREIRO to the effect that the fresh fruits are used for preserving fish, and that the bark of the tree has properties similar to those of the berries.

**DAPHNIS MYRRHÆ.**—烏藥 (*Wu-yoh*).—The identification of this Anacardiaceous tree is from TATARINOV. This genus is apparent ly the Daphnitis of Sprengel, but no opportunity of examining anything but the prepared root has been afforded. The tree grows to the height of more than ten feet, and is met with in Sz-ching fu and Wu-chau fu in Kwangsi, in Tai-chau fu (Chehkiang), and in Hang-chau fu, in Hunan. It is compared to the tea-shrub in look. The drug is usually sold in the form of thin slices of the dried root, of a whitish colour, and having an aromatic odour. Tonic, astringent, carminative, stomachic, and many other properties are assigned to this root, which is supposed to act like the Lign-Aloes.

**DATES.**—棗 (*Tsáu*).—This Chinese word, usually translated "dates," is most generally given to the fruits of Zizyphus and Rhamnus. The tree-date is the fruit of the Phœnix dactylifera, called 無漏子 (*Wu-lau-tsze*), or 番棗 (*Fan-tsau*), with several other synonymes denoting foreign origin. Tonic, expectorant, tussic, and nutrient properties are ascribed to this important food-fruit. The fruit of the Diospyros is called the Date Plum, in America, and 軟棗 (*Yuen-ts'au*), by the Chinese. See *Zizyphus.*

**DATURA ALBA.**—曼陀羅花 (*Man-to-lo-hwa*).—HOFFMAN and SCHULTES have determined one of the thorn-apple plants, known in China by this generic name, to be this white species, which is a common weed in China and in India. The names *Man-to-lo*, or *Mandara* in Sanscrit, signifies a variegated flower. This plant is said to have been rained down from heaven. EITEL (Handbook of Chinese Buddhism, p. 71.) refers the name to Erythrina fulgens, or E. Indica, both of which are probably met with in China. The flowers called 醉仙花 (*Tsui-sin-hwa*), are used as a wash for eruptions on the face, œdema of the feet, and prolapsus of the rectum. They are digested in wine and given as an anæsthetic, or prescribed with other drugs in the chorea of children. The leaves of this plant, called *Dhatura* in India, are said by Dr. WARING to contain an active, poisonous alkaloid Datura, which is a white, crystallizable substance, identical with the active principle of Hyoscyamus niger. They are useful as poultices to painful swellings. The seeds, officinal in China, are strongly recommended by Dr. **Waring** for use as a tincture, which he has found to be equal to laudanum as a narcotic. Twenty drops of a tincture made by macerating two ounces and a-half of the bruised seeds in a pint of proof spirit for a week, are estimated to be equal to one grain of that expensive drug opium. An extract of the seeds, and one made from the leaves and young branches in the same manner as the extract of henbane, have found much favour in India. The Datura stramonium differs but little from the D. Alba. 風茄兒 (*Fung-kia-rh*), and 山茄子 (*Shan-kia-tsze*), are given as synonymes of Datura Alba, or D. Stramonium, the thorn apple of popular botany, which is weaker than the former in its medicinal qualities. **Hoffman** and **Schultes** assume 佛茄兒 (*Fuh-kia-rh*), as the name of D. Stramonium. Such name is not known here, and may be a mistake, or a popular exchange, for *Fung-kia-rh.* The Datura ferox is said by **Burnett** to be found in China.

**DATURA METEL.**—鬧羊花 (*Nau-yang-hwa*).—This species of Datura is included in **Burnett**'s list of the Flora of China, and this name is assigned to it by Dr. **Bridgman**, in his Chinese Chrestomathy. The Andromeda, Hyoscyamus and Azalea are more correctly called by this name.

**DATURA STRAMONIUM**—佛茄兒 (*Fuh-kia-rh*), 風茄兒 (*Fung-kia-rh*).—See *Datura alba.* The leaves of this plant, or of the D. Alba are worth trying as a remedy in asthma. The Chinese are inveterate smokers, and as the weed is very common, it is easy to direct the numerous sufferers, of all ages, met with amongst the Chinese, to dry and smoke the leaves. The leaves of the Datura fastuosa, a purple-flowered variety, have been very efficacious in asthma in Indian medical practice.

**DAUCUS CAROTA.**—胡蘿蔔 (*Hu-lo-peh*).—See *Carrot.*

**DECOCTION OF BARLEY.**—大麥粥 (*Ta-meh chuh*).—The Chinese decoction is made by boiling plain barley or a mixture of it with ginger and honey. The simple decoction is used as a wash in cases of wounded abdomen, with extrusion of the intestines, and is given internally, as well as the compound decoction, as a cooling, demulcent and lenitive drink.

**DECOCTION OF ELM-BARK.**—榆皮湯 (*Yü-p‘i-t‘ang*).—The inner bark of the Chinese elm is used to make a demulcent, soothing and diuretic remedy, strongly recommended in urinary and dropsical disorders. It is chiefly used as an external wash at the present time in the treatment of skin-diseases. .

**DECOCTION OF LINSEED.**—胡麻茶 (*Hu-ma-ch‘a*).—This "tea," made by boiling linseed, is often drank by the Chinese villagers, who compound it with the Sesamum, or Til seeds. The medical books recommend it in fevers, rheumatism, dropsy and hæmaturia.

**DECOCTION OF NUT-GALLS.**—百藥煎 (*Peh-yoh-t‘ang*).—See *Nut-galls.*

**DECOCTION OF OAK-BARK.**—槲皮湯 (*Huh-p‘i-t‘ang*).—See *Oak-bark.*

**DECOCTION OF POMEGRANATE**—石榴湯 (*Shih-liu-t‘ang*).—See *Pomegranate.*

**DECOCTION OF POPPY-HEADS.**—罌殼湯 (*Ying-kuh-t‘ang*).—See *Poppy, White.*

**DECOCTION OF SAPPAN-WOOD.**—蘇木汁 (*Su-muh-chih*).—See *Logwood.*

**DECOCTION OF SARSAPARILLA.**—茯苓湯 (*Fuh-ling-tʻang*).—See *China Root, and Smilax Chinensis.*

**DECOCTION OF STARCH.**—米湯 (*Mi-tʻang*).—This "rice-soup" is really made by boiling common rice in water. As it is always at hand, it makes a cheap and ready menstruum.

**DECOCTION, TONIC.**—四君子湯 (*Szʻ-kiun-tsze-tʻang*).—The important "sovereign" remedies prescribed in the old herbal of *Shin-nung* as tonic, to the number of some one hundred and twenty innocuous drugs, were called 君 *Kiun*, and subordinate medicines, aiding as "ministers," the *Kiun*, or prince, were termed 臣 *Chʻin.* This decoction prepared by boiling Ginseng-root, the root of Atractylodes alba, China Root and Liquorice-root, is given in general debility phthisis, liver diseases, and marasmus.

**DEER'S HORN.**—鹿角 (*Luh-koh*).—See *Hartshorn.*

**DENDROBIUM CERAIA.**—石斛 (*Shih-huh*).—Several species, or varieties, of this genus of Orchidaceous plants have been observed in China, and in Cochin China by LOUREIRO, who looked upon Ceraia as a distinct genus. The *Shih-huh* grows upon stones, and is sometimes called 黃草 *Hwang-tsʻau.* It comes from Fung-yang fu and Luh-ngan chau in Nganhwui, Nan-kang fu and Kiu-kiang fu in Kiangsi, Shau-chau fu and Nan-hiung fu in Canton province, and from Kwang chau and other places in Honan. A kind called 五色石斛 (*Wu-sih-shih-huh*) is brought from Wu-ting chau. in Yunnan. 木斛 (*Muh-huh*) is an epiphytic variety, sometimes called, from the yellow colour which belongs to all of these Orchids, 金斛 (*Kin-huh.*) They are all remarkably tenacious of life, recovering after having been dried. Two smaller samples of this plant with the grassy leaves attached have been met with in the Hankow drug-warehouses, labelled 乾石斛 (*Kan-shih-huh*), and 鮮石斛 (*Sien-shih-huh,*) 金釵 (*Kin-chʻai*) is another name of these smaller-stemmed epiphytes. All these drugs have straight, jointed, solid, cylindrical stems of a yellow, golden color, and often deeply striated, or furrowed. Parallel-veined leaves are attached to some of the stems which commonly have traces of their roots. These stems are said to be quite green when freshly gathered. Species of Triticum, of a wild nature, such as the Triticum repens, and species of mistletoe are evidently included under this term for a particular class of epiphytes. These drugs have scarcely any notable properties, but they are nevertheless credited with tonic, stomachic, pectoral and antiphlogistic qualities. The 小環釵 (*Siau-hwan-chʻai*) of HANDURN's notes (page 34), is probably a *Shih-huh.* See *Triticum repens.*

**DEXTRINE**—麪膏 (*Mien-kau*).—This substance, more correctly called British Gum, is made by heating common wheaten flour up to about 4000° Fah. It is very useful in the preparation of the starched bandage for the ready treatment of fractures, a plan very desirable in Chinese hospitals, where the native patients are very restless, and intolerant of restraint.

**DIALIUM.**—肥皂荳 (*Fei-tsau-tau*).—This identification is put forward, doubtfully, by HANBURY for what is most probably the 肥皂子 (*Fei-tsau-tsze*), of the Chinese, the seeds of Acacia concinna, which see.

**DIAMOND.**—金剛石 (*Kin-kang-shih*).—The Chinese account of Corundum shows that they had some notion of the diamond, which is said by the Buddhist priests to be a symbol of the all-conquering nature of Buddha. India would probably supply them with both articles of the genuine type. See *Corundum.*

**DIANTHUS CARYOPHYLLUS**.—剪春羅 (*Tsʻien-chʻun-lo*).—Several species of Dianthus are found in the wild and cultivated states in China. The dried fruit of this and the next plant, being covered with a glumaceous calyx, the Chinese have been led to look upon them as allied to the Gramineæ. The long, dried stalks are often made into brooms.

**DIANTHUS FISCHERI**.—瞿麥 (*Kʻü-meh*), 石竹 (*Shih-chuh*).—The dried flowering plant is sold in the herbalists' shops in large, yellow bundles. It appears to have some of the active principle saponine, found to exist in Silenads. It is used to produce abortion, as a diuretic and anthelmintic, and as an eye-wash. The Chinese look upon this plant as allied to the bamboo. This plant grows all over China. Lohyang, in Honan, the garden of the "Flowery Kingdom," formerly had a large number of varieties of Caryophyllaceous plants.

**DIGITALIS**.—毛地黃 (*Mau-ti-hwang*).—See *Foxglove.*

**DIOSCOREA SATIVA**.—薯蕷 (*Shü-yü*), 山藥 (*Shan-yoh*).—Several species of this Dictyogenous genus are used in medicine as nutrient, tonic, astringent and discutient remedies. The wild plant is preferred. The long, fleshy tubers, bristled with radicular fibres, disposed quite regularly, are met with in the streets of Hankow, more than a foot in length. They are of a brown colour, and their white fleshy substance has an agreeable flavour when boiled with meat, after the Chinese fashion. There is a drug called 淮山藥 (*Hwai-shan-yoh*), or the yam from Hwai-ning hien, in Honan, which is said to be derived from a Dioscorea akin to this species. It is in hard, smooth, beautifully white, tapering pieces, shaped something like cigars. They are prescribed in diarrhœa. See *Yam.*

**DIOSCOREA TRIPHYLLA**.—薯蕷 (*Shü-yü*).—The ternate leaves of this plant are officinal, and the nauseous tubers are sometimes cooked and eaten by the omnivorous Chinese. They are used topically as applications to swellings and frostbites.

**DIOSPYROS GLUTINIFERA**.—椑柹 (*Pi-tsʻzʻ*), 漆柹 (*Tsʻih-tsʻzʻ*).—The Chinese call this the "green persimmon" from the fact that the fruit when fully ripe is of a dark yellowish tint. The fruit is of the size of a plum, or small apple, eight-seeded, and contains a glutinous, very astringent juice. Hing-kwoh-chau, Lo-tien hien and Siang-yang in Hupeh are local sources of this fruit and of the varnish extract, or oil, which is extracted by pressure from the pulp of the fruits. Nganhwui, Fuhkien and Canton provinces have the tree, which is not turned to any medicinal account at the present time. The authors of the *Pen Tsʻau* have quite misunderstood the properties of the fruit, which are set down by them as antifebrile, anti-vinous, and demulcent. Dr. WARING strongly recommends the extract of the fruit as an astringent in diarrhœa and chronic dissentery, and as the basis of vaginal injections in lencorrhœa. This tree (Ebenaceæ) is variously called Embryopteris glutinifera, and Diospyros Embryopteris. See *Oil of Persimmon.*

**DIOSPYROS KAKI**.—柹 (*Szʻ or Tszʻ*).—The fruit of this tree, which is common in China and Japan, is the persimmon, a large, thin-skinned, juicy fruit of an orange, or yellowish colour, and having a sweet taste, with an occasional after-taste of austerity. Traces of the eight-celled character of the fruit, which presents a great variety of shapes, sizes and tints, are sometimes met with. The dried fruit is preserved with sugar and sometimes exported. The ordinary fruits met with here have been artificially ripened by inserting a piece of bamboo by the side of the stalk of the fruit, which becomes prematurely ripe. BURNETT speaks of the Diospyros vaccinioides as met with in China. It is probably the 君遷子 (*Kiun-ts'ien-tsze*), of the *Pen Ts'au*. The name 棗 (*Tsau*) is given to these fruits, which do not differ in some cases from the D. Virginia, or Date-plum of the American Dispensatory. 鎮頭迦 (*Chin-t'u-kia*) is said to be the *Hu*, or Tungusic name for the D. Kaki. Pulmonary, febrile, stomachic, and urinary disorders are said to be benefited by the fruit in various forms. The dried fruit is given to children with worms or pot-belly.

**DIOSPYROS LOTUS.**—墨棗兒 (*Meh-tsau-rh*).—TATARINOV gives this name for the fruit which is the Zizyphus lotus, or true lotus of the ancient Lotophagi, a Rhamnaceous fruit. No reference of this "black date" to any kind of Diospyros has been met with in Chinese botanical works.

**DIOSPYROS MELANOXYLON.**—烏木 (*Wu-muh*), 烏椑 (*Wu-pi*).—The heart-wood of this tree, as well as that of the D. ebenus, is imported into China from the Straits. Kiung-chau fu, on the island of Haiuan, Yung-peh ting, and Yun-nan fu in Yunnan, and Tai-p'ing fu in Kwangsi, supply ebony wood. The *Pen Ts'au* attributes much the same astringent properties to this tree as are mentioned by WARING in the Indian Pharmacopaia.

**DIOSPYROS TOMENTOSA.**—毛柹 (*Mau-ts'z'*).—The fruit of this tree is not known in China, but the wood called Camagon, an inferior kind of ebony, is met with, and is probably indigenous as well as imported.

**DITTANY.**—龍譫草 *Lung-tan-ts'au*)—The root of Dictamnus is apparently met with under the generic name of *Lung-tan*, or "dragon's gall," which stands for .Gentian, and for any other very bitter root.

**DOCK.**—羊蹄 (*Yang-t'i*).—Several species of Rumex are met with in Hupeh. The *Yang-t'i*, is the common Rumex hydrolapathum, also called 野大黃 (*Ye-ta-hwang*), or "wild rhubarb," Rumex acetosa, or 酸模 (*Swan-mo*), and Rumex alpinus, or Monk's Rhubarb, called by the Chinese 山大黃 (*Shan-ta-hwang*), or "mountain rhubarb," are eaten as herbs, and the roots used as purgatives and vermifuges. The principal use of these docks at the present time is as a popular application to lepra, porrigo, scabies, and swellings, the root being generally used. The *Yang-t'i* is set down as cooling, anthelmintic, and good in the ephemeral fever of lying-in women.

**DODDER.**—菟絲子 (*T'u-sz'-tsze*).—The seeds of Cuscuta Europœa and C. Chinensis are met with as roundish bodies of the size of black mustard-seed, and of a brown colour, with little or no taste or smell. Tonic, diaphoretic and demulcent properties are believed by the Chinese to reside in these inert seeds. They are given in blenorrhœa, incontinence of urine, leucorrhœa, and as a nostrum in cases of cross-birth. Hwai-king fu in Honan, a noted source of drugs, supplies the Hankow druggists. The young shoots of these leafless parasites, so destructive to trees, are acrid, and used externally, to make washes for sore heads and inflamed eyes. Hanbury says that the plant was formerly officinal in Europe as a purgative, under the name of Herba Cuscutæ Majoris. 女蘿 (*Nu-lo*), is the name of certain Cuscutaceous parasites growing upon fir-trees and other trees. Acrid and emetic properties belong to these plants which are met with in Manchuria, North China and Corea, and are sometimes called 松蘿 (*'Sung-lo*). These dodders destroy growing crops to a frightful extent, under some circumstances.

**DOG-ROSE.**—金櫻子 (*Kin-ying-tsze*).—See *Rosa canina*.

**DOLICHOS SOJA.**—黃大豆 (*Hwang-ta-tau*), 毛豆 (*Mau-tau*).—The hairy, short pods of this Leguminous plant are eaten, when freed from the valves. They are mixed with vinegar and sesamum-oil, and drank as a cooling draught in summer. The ripe, ovoid, yellow beans are used to make bean-curd 豆腐 (*Tau-fu*), a substance largely consumed by the Chinese when vegetables are not very plentiful. It is the cheese of the Chinaman. The beans are ground and pressed to produce the bean-oil, or pea-oil, as it is sometimes miscalled by foreigners. The beans are said to be laxative, peptic and nutrient. Bean-sprouts 豆芽 (*Tau-ya*), are the germinating beans of this plant, artificially raised in large quantities for food in winter.

**DOLICHOS TRILOBUS.**—葛 (*Koh*).—Six or seven species of Dolichos are found in China. The Pachyrizus trilobus is sometimes included under this name. Tatarinov gives 葛條花 (*Koh-t'iau-hwa*), as the name of P. trilobus. A fibre resembling linen, called 葛布 (*Koh-pu*), or 貢葛 (*Kung-koh*), of a yellow colour, very fine and durable, and much prized in Hankow, is obtained from the climbing branches. The best of this cloth comes from Wu-chang hien (Hupeh), and from Kwang-sin fu in Kiangsi. The root is eaten, although to some extent deleterious, if not thoroughly cooked. A kind of arrow-root, called 葛粉 (*Koh-fen*), is made from the root in Ngan-king fu (Nganhwui), Kwang-sin fu (Kiangsi) and at Teh-ngan fu (Hupeh). Emetic, diaphoretic and antiphlogistic properties reside in the root, which is given in fevers, exanthemata and rashes of all kinds, and in bloody fluxes. Every part of the plant is officinal.

**DOLOMITE.**—花蕊石 (*Hwa-jü-shih*).—A granular mineral, met with in Tai-chau fu (Chehkiang), in Wan-hiang hien (Honan), Tai chau (Shansi) and in T'ung-chau fu (Shensi) It is found in irregular roundish masses, mammillated and greyish-brown on the outside, and of a greenish colour in the interior, variegated with white and bright spots. Shensi people make vessels out of this rock for common use. A more scarce, variegated kind, brought from Tai chau (Shansi) is said to be used to replace cinnabar. It is powdered, and used internally or externally, as an astringent, styptic, vulnerary, absorbent and opthalmic remedy. This is one of the few mineral remedies now in constant use. It dissolves slowly, with effervescence in dilute sulphuric acid, leaving a solution of the sulphates of lime and magnesia.

**DOVER'S POWDER.**—鴉片散 (*Ya-p'ien-san*).—A name used by Dr. Hobson.

**DRAGON'S BLOOD.**—騏驎竭 (*K'i-lin-kieh*), 血竭 (*Hiueh-kieh*), 硃結 (*Chu-kieh*)—Dr. Williams gives 龍涎香 (*Lung-sin-hiang*) or "dragon's spittle gumresin," as a name of this drug, placed by him amongst the imports. The tree growing in Sumatra, Java and other countries to the south of China is said to be met with in the southern provinces of China. Its name is given as 渴留 (*Koh-liu*), and the lofty tree is described as resembling the Balsamodendron Myrrha. The tree is said to be chopped to yield this gum, which is supposed to come from *Ta-shih-kwoh* (Arabia). Dr. Williams describes the drug as "in drops, of a bright crimson colour when powdered, and semi-transparent." It "covers the fruit of the Calamus draco, and is obtained by beating the fruit in little baskets." The best of this description is imported from Singapore. The common drug of Hankow is sold in large dark-red friable masses, which have evidently been packed in matting. It makes a deep blood-red, gritty, almost tasteless powder, soluble in spirits of wine. It is probably the product of Pterocarpus Draco (Leguminoseæ). Astringent, styptic, tonic, alterative and vulnerary properties are assigned to it by the Chinese medical authors. Dragon's spittle is an item in the list of drugs obtained from the dragon and is evidently a kind of ambergris.

**DRAGON'S BONES.**—龍骨 (*Lung-kuh*).—Irregular pieces of fossil ivory, weighing a few ounces, are sold, as Hanbury remarks, in stamped packages. They have been examined microscopically by the latter observer and proved to be, at least in some cases, fossil ivory. Fossil bones of the Stegodon orientalis of Swinhoe are brought from Ching-tu fu and Ch‘ung-king fu in Sech‘uen in large broken masses, showing the cancellous structure of the large fossil bones of proboscidians. Portions of lime-stone matrix, bearing the impressions of these bones, are sold with these genuine fossils, which are also brought from I′-chau fu in Shantung, Tsang chau near T‘ientsin, and from Tai-yuen fu in Shanse. They are powdered, levigated and used in chorea, spermatorrhœa, ague, fevers, hœmorrhages, and fluxes.

**DRAGON'S SPITTLE.**—龍涎 (*Lung-sin*).—A costly, odorous, light-yellow, gummy substance found floating on the sea, or procured from the belly of some large fish in the Indian Ocean, is described in such a particular way, under this name of *Lung-sin*, as to leave no doubt that ambergris is meant. This is probably the origin of Dr. Williams' *Lung-sin-hiang*, a name applied to a counterfeit ambergris, made by mixing together Borneo Camphor and Musk, The dragon is said to cough up this ambergris. A similar substance called 吉弔脂 (*Kih-tiau-chi*), brought from Canton and Foochow in former days, is said to be the egg of the dragon or a kind of sea-serpent named 吉弔 (*Kih-tiau*). This drug is of a greyish, or yellowish colour, according to Chinese writers, and is asserted to have marvellous discutient, vulnerary and healing properties. The name *Kih-tiau* is singularly like the Greek name for a sea-monster.

**DRAGON'S TEETH.**..龍齒 (*Lung-ch'i*)...Fossil teeth of the Stegodon Sinensis (Owen), have been found in the marly beds of the country round Shanghai by Lockhart, and of the Stegodon Orientalis (Owen), by Swinhoe, near Ch'ung-king fu in Sech‘uen. These, with the horns of the Chalicotherium Sinense (Swinhoe), the teeth of Hyla Sinensis, from Ch'ung-king fu and from Ching-tu fu, in Sech‘uen, and molars of Mastodons, Elephants, Sheep, Stags, teeth of the Hippotherium, described by Hanbury, after Waterhouse, as coming from Shensi and Shansi, are sold under this name of *Lung-ch'i*. They are supposed to act on the liver, and to be of great service as cordial or sedative remedies.

**DULCAMARA.**—蜀羊泉 (*Shuh-yang-ts'iuen*).—See *Solanum dulcamara*.

**DUNG OF THE AVADAVAT.**—雄雀屎.—See *Fringilla amanduva.*

**DUNG OF THE BAT.**—夜明砂.—See *Bat.*

**DUNG OF THE COMMON SPARROW.**—公麻雀糞 (*Kung-ma-tsioh-fen*).—The excrement of the common house-sparrow (Passer montanus), is mixed with pepper-corns, powdered, and then mixed up by means of spirits of wine. This mess is used to diminish the pain of opening abscesses, the thick compound being first applied for some time to the skin. It is also applied to the wounds caused by arrow-heads or shot, to diminish the pain of extracting the foreign bodies. See *Chloroform.*

**DUNG OF THE MAGPIE.**—寒號蟲 (*Han-hau-ch'ung*), 五靈脂 (*Wu-ling-chi*).—The nest of the magpie is burnt, and the ashes given in nervous diseases, fluxes, and other diseases. The droppings of a bird which is not a magpie, as Tatarinov asserts, but a Loriculus, found in Shansi and Shensi, are called by the names *Han-hau-ch'ung* and *Wu-líng-chí*, the latter name denoting its supposed relation to the five elements. The dung of a species of Coturnix is perhaps mixed with the drug, which comes to Hankow from Tai-yuen fu, in Shansi, in the shape of small, oblong, round or conical pellets, of a black colour, very light, easily broken, and having a burnt or sweetish flavour. It is said to be cordial, sedative, antiperiodic, astringent, anthelmintic, and vulnerary, with almost any other quality that could be enumerated. It is one of the remedies for leprosy, being applied to the benumbed parts in the form of an ointment. The brain of the magpie is eaten to increase the thinking power.

**DUNG OF THE WHITE PIGEON.**—左盤龍 (*Tso-pw'an-lung*).—Very interesting particulars about Pigeons and Doves are given by Mr T. Watters, in Vol. IV. of the New Series of the Transactions of the N. C. B. R. A. S. The dung of the wild pigeon is used as a veterinary medicine, and is credited with discutient, deobstruent, alterative, anthelmintic, antiscorbutic, and vulnerary properties. The name "left coiling dragon" is given to this disgusting article, from the assumed fact that the excrement which, in dropping from the bird, coils itself from right to left, is wonderfully efficient as a drug.

## E

**EAGLE-WOOD.**—牙香 (*Ya-hiang*).—A light, spongy wood, formed of coarse, parallel fibres, devoid of aroma, but having a bitterish taste, thus described by Hanbury, on page 36 of his "Notes." It is not known here, nor has any special mention been found of it in the *Pen Ts'au.* Dr. Williams refers it to the Aquilaria Chinensis of Sprengel, which is the Ophiospermum Sinense of Loururo, who gives *Pă moŭ* (*Pah-muh-yang*), as its Chinese name. **Eagle-wood** is properly the name of the *Garroo*, or *Gahru* wood of the Aquilaria Agallocchum, whose wood when decayed is the *Ch‘in-hiang*, or Lign-Aloes, of the Chinese.

**EGG-FLIP.**—打蛋湯 (*Tu-tan-t‘ang*).—The Chinese are very skilful in whipping up eggs. This mixture of sugar, eggs and boiling water, with a little soy or some other flavouring ingredient, is used by Chinese drunkards after a debauch. With a little brandy or wine it makes an excellent drink for the sick. See *Brandy-mixture.*

**EGG-FLOWER.**—雞 蛋 花 (*Ki-tan-hwa*).—This Chinese name for the Plumieria acuminata, an Apocynaceous plant, is not very intelligible. Several species, such as P. obtusa and P. alba are met with in China. Dr. HANCE suggests that this milky, fragrant plant is of American origin, and this is confirmed by the absence of any mention of the plant from all Chinese works. Acrid, cathartic, and even drastic properties attach to this genus.

**EGG-PLANT.**—牛 心 茄 (*Niu-sin-kia*), 茄 (*Kia*).—The first name, "ox-heart solanum," refers to the white, or variegated, fruited varieties of Solanum melongena, the Brinjal, or Aubergine, of European countries. The purple-fruited variety, much cultivated near Hankow, is little like an egg, being long in shape and of a dark purple colour. The white variety fully deserves the name of Egg-plant, for it becomes of a beautiful yellow colour when old. It is then used as a poultice to disperse swellings. See *Solanum Melongena.*

**ELÆOCOCCA VERRUCOSA.**—罌 子 桐 (*Ying-tsze-t'ung*) 油 桐 (*Yú-t'ung*).—This Euphorbiaceous tree is confounded with Jatrophas (Curcas) purgans, and is probably identical with the Dryandra cordata of THUNBERG. It grows plentifully in the valley of the Yangtsze. The seeds furnish the Wood Oil (桐 子 油 (*T'ung-tsze-yü*) of Chinese commerce. The fruits are very acrid, causing vomiting, pain, and purging. The Elæcocca vernica also furnishes some of the wood-oil or varnish-oil so extensively used in daubing over boats, junks and rough wood-work. See *Wood Oil.*

**ELAPHURUS DAVIDIANUS.**—麈 (*Chü*), 駝 鹿 (*T'o-luh*).—This peculiar kind of deer was formerly much more common in China than at the present time. It has been described by ALPHONSE MILNE-EDWARDS from specimens procured by that veteran naturalist PERE DAVID, of Peking. A pair is now to be seen in the London Zoological Gardens. The tail is long and full and the feet clumsy, as those of the cow. The Chinese call it 四 不 像 (*Sz-puh-siang*), as like, and yet not like, either of the four animals from which they conceive it to have borrowed the plan of its body, namely, the horns from the stag, its feet from the cow, its neck from the camel, and its tail from the ass! It is in the Imperial Park, on the south of Peking. The eastern part of Manchuria, the south-western portion of Kokonor, the district of Tarbagatai on the frontiers of I'li, and the northern and central part of Sech'uen province would seem to have been places frequented by this curious animal. The herds of deer are said to follow one of these as their leader, known by his tail, which sweeps the ground. The *Pen Ts'au*, quoting other works, says that they are large animals, of a brownish-yellow colour, without any markings, and have large, solid, shining horns with lines on the surface. They are used to make the hartshorn, and the preparations from that substance, but they are not in great request. The tail is carried about by some of the Tauist monks as their fan, called 彈 箒 (*Tan-chau*), to keep their persons free from the dust and contamination of the world. The tail is also kept along with cloth to preserve it from the attacks of insects.

**ELATERIUM.**—苦 瓜 汁 (*K'u-kwa-chih*).—The *K'u-kwa* is the Balsam Apple, or Momordica Balsamina of Linnæus, which has purgative properties although eaten by the Chinese, after careful washing in warm water, and subsequent cooking. This name is coined, as the Momordica Elaterium (or Ecbalium Officinarum), has never been met with in China. See *Momordica Baisamina.* 苦匏 (*K'u-p'au*) is probably a species of Colocynth Gourd, used in dropsy, and very efficient as a purgative, or emetic.

**ELECAMPANE.**—旋覆花 (*Siuen-fuh-hwa*).—See *Inula Chinensis.*

**ELEMI**—欖香 (*Lan-hiang*).—A soft, sticky, dark resinous mass, compared to cow-glue, and having a strong aromatic smell is procured, or prepared, from the Canarium Pimela, and is spoken of in the *Pen Ts'au.* It resembles the East Indian, or Manilla Elemi of commerce, the product of Canarium commune, in all probability. It is not used medicinally. See *Dammar.*

**ELEOCHARIS (SCIRPUS) TUBEROSUS.**—烏芋 (*Wu-yü*), 葧臍 (*Puh-tsi*).—The tubers of this "black taro," are compared by the Chinese to the navel in form. They are largely cultivated, boiled, and sold as food all over China. They grow wild in Hupeh, in watery places, and are not often specially planted. They are sweet, juicy, and resemble the chestnut in flavour, so that foreigners call them "water-chestnuts," as the Chinese do 地栗 (*Ti-lih*), or "ground-chestnuts." A kind of arrow-root is made from it, which is called 馬蹄粉 (*Ma-t'i-fen*). The term *Ma-t'i-ts'au* properly belongs to another water plant, the 蓴 (*Shun*), of the *Pen Ts'au.* It is given in mucous and bloody fluxes, hæmaturia, and is a very common nostrum given to children when they swallow cash.

**ELM-BARK.**—榆皮 (*Yü-p'i*).—Ulmus Chinensis and U. pumila are given by BURNETT as Chinese species of the Elm. A white variety is called 枌 (*Fen*). The liber is brought from Sz'-ching fu and Si-lung chau in Kwangsi, and from Han-chung fu and Sáng chau in Shensi. A bark called 千葉榆皮 (*Tsien-yeh-yú-p'i*) comes from Ching-tu fu in Sechuen. The sawdust and bark enter into the composition of incense, just as they formed the basis of certain kinds of snuff in Europe. A kind of paste used to be made of it, and, in times of great scarcity, the ground bark, the leaves, and the membranous fruit are all eaten as food. Demulcent lenitive, diuretic, and antiphlogistic properties are referred to this useful drug in the *Pen Ts'au.* It is applied, with oil or vinegar, to sundry parasitic and porriginous erruptions. The fruit of the elm, the leaves, flowers, and a large fungus growing upon the elm are all officinal.

**EMYS.**—鼈甲 (*Pieh-kiah*).—The carapace of a species of freshwater turtle, or tortoise, is so named by the Chinese from its shuffling gait. Chinkiang in Kiangsu, Yuen-kiang hien and Yoh-chau fu in Hunan, are said to yield the best. The animal is met with all through the Yangtsze valley. The flesh is eaten with vinegar, and is considered to be strengthening pectoral, and deobstruent. The fat is said to prevent the hair from becoming gray. The empty carapaces found on the ground are reputed to make the best medicine. The animal used medicinally weighs from nine to ten ounces. The ordinary shell sold in the shops is about five inches square, oval in shape, and marked on the concave internal surface by the eight ribs, which project to the extent of some half-an-inch beyond the carapace. The external convex surface is darker than the inner surface, closely reticulated, and marked by lines corresponding to the middle of the intercostal spaces. There are foramina near the anterior part. Some of the specimens, said to be marked with nine ribs, are in great repute. The shell is heated in vinegar, and then boiled to produce the jelly, which is in so much repute in fevers, acute rheumatism, debility, and amenorrhœa. The shell is sometimes burnt and reduced to a powder, and made into a tincture as a remedy in ague.

**ENDIVE.**—苦菜 (*K'u-ts'ai*).—See *Cichorium.*

**EPHEDRA FLAVA.**—麻黃 (*Ma-hwang*).—A large number of species of Ephedra is met with in various parts of Asia, and the plant, belonging to the Coniferous order of Gnetaceæ, is spread all over China. The best drug, consisting of the yellow, jointed stems of the plant, tied up in small bundles, or cut up into chaff, comes from K'ai-fung fu, in Honan. The plant is said to be diœcious, and to have yellow flowers. The branches and flowers (Amenta Uvœ Maritimæ) are said by LINDLEY to have been formerly officinal in Europe as styptics. Antiphlogistic, diaphoretic, pectoral and tussic properties are ascribed to the branches. They are now almost exclusively used as derivatives to the skin. Their taste indicates some astringency, which is said by the Chinese to be very marked in the root, officinal as a remedy in critical and other sweats. The fruit is eaten by the Chinese, and is mucilaginous, with a slightly acid or pungent flavour.

**EPIPHYTES.**—寓木 (*Yú-muh*).—Epiphytes differ from Parasites in the fact that they do not ordinarily derive their nourishment from the trees upon which they are found. 寄生 (*Kí-sang*) is another name for these "lodgers." 斛 (*Huh*), is a name applied to parasitic Orchids, as well as to Loranthaceous plants. See *Mulberry Epiphyte*, and *Willow Epiphyte.*

**EPSOM SALTS.**—苦消 (*K'u-siau*).—A mineral salt is alluded to in the *Pen Ts'au*, under the article 消石 (*Siau-shih*), or Nitre, as present in the bittern, or mother-liquor, from which salt is prepared. It is described as yellowish-white in colour, bitter to the taste, cooling, stomachic, purgative, hydragogue and deobstruent. This salt is referred to the *Ying* principle, whereas sulphate of soda 朴消 (*Poh-siau*), is said to belong to the *Yang* principle.

**EQUISETUM HYEMALE.**—木賊 (*Muh-ts'ih*).—This species of Horsetail grows to a considerable height in marshy places in Kansuh and Shensi, and with Equisetum arvense, also met with in China, is used to polish wood. A large quantity of silex, arranged in a beautifully regular manner in the cuticular structure, confers this property. For medicinal purposes the Chinese deprive the leafless, striated, fistular stems of their cuticular sheaths, and reduce them to a rough powder, which was formerly much used as an astringent remedy. It is at the present time mainly used to treat inflamed eyes and epiphora. 問荊 (*Wen-king*), is a species of Horsetail, brought from Pehchihli.

**ERGOT.**—霉麦 (*Mei-meh*).—The Chinese do not cultivate the rye, unless it be a form of their 稗 (*Pai*), or (*Pi*), or "tares." This name *Mei-meh*, "mildewed corn" is coined to denote the ergotized grain. Maize sometimes becomes ergotized, and rice, according to the late Dr. TYTLER, has been known to produce cholera in India, from having undergone this change. Under the name 穬麦 (*Kwang-meh*) various grains are included, some of which are said to produce abortion under some circumstances.

**ERIOBTRYA JAPONICA.**—枇杷 (*P'i-p'a*).—The panduriform leaves of this Japanese medlar resemble the Chinese violin, or guitar, with four or five strings, called 琵琶 (*Pʻi-pʻa*), and hence its name. The fruit is yellow, hairy and pomaceous, and is commonly confounded with the fruit of the Cratægus bibus. A fruit said to be the *Pʻi-ʻpa*, sold in Hankow during the fifth (Chinese) month, of a yellow colour, one to four celled, containing large, brown, shining obscurely triangular seeds. This would seem to be the Cratœgus bibus of Tatarinov. The leaves of the *Pʻi-pʻa* are used in coughs. Cooling and astringent properties are referred to the leaves, deprived of their down, according to the *Pen Tsʻau*.

**ERIOCAULON CANTONIENSE.**—穀精草 (*Kuh-tsing-tsʻau*).—This troublesome weed in Chinese gardens and cornfields, with its small leaves and tiny flowers, is a great remedy for the eye-diseases of children, after smallpox, and in tinea tarsi. This species, and E. setaceum, known by the same name, is sold in bundles of the dried herbage, formerly used as a cephalic remedy, and as a styptic in nose-bleeding, a common affection amongst the Chinese.

**ERIOGLOSSUM.**—通大海 (*Tʻung-ta-hai*).—See *Bungtalai.*

**ERYTHRINA INDICA.**—渴稟 (*Kʻoh-pʻing*).—Mr. Eitel, in his Handbook of Chinese Buddhism (page 71), gives 曼陀羅 (*Man-to-lo*) as the Buddhist name for this species, or the E. fulgens. See *Gum Lac.*

**ESCHSCHOLTZIA CRISTATA.**—茹香 (*Hiang-jü*).—A fragrant plant is set down by Tatarinov under this name. It is apparently the same as that called in the *Pen Tsʻau*, and by the local druggists 香薷 (*Hiang-jü*), and is a kind of Vervain, perhaps, grown in gardens, and used as a pot herb, or condiment. It is used in much the same cases as the kindred Labiates, namely as a cordial, tonic, stomachic, astringent, and carminative.

**ESSENCES.**—花露 (*Hwa-lú*).—Preparations, called "dew of flowers," made by distilling the flowers of the Jasmine, Rose, and other flowers, are mentioned in the *Pen Tsʻau.* The druggists sport these words *Hwa-lú* on their numerous gay signboards, hanging like loose shutters in front of their open, front-less shops. See *Lavender Water* and *Rose Water.*

**ETHER.**—弱水 (*Joh-shwui*).—The Chinese know nothing about ether. This word for a fluid brought from the West, of the lightest possible specific gravity, is adopted for this mobile, volatile fluid.

**EUONYMUS.**—合莞 (*Hoh-yuen*).—This name, given by Tatarinov, has not been met with in Hankow.

**EUONYMUS JAPONICUS.**—杜仲 (*Tu-chnng*), 木棉 (*Muh-mien*).—This Celastraceous tree grows in Honan (Nan-yang fu), Shensi and Shansi. It is called by the same name as the Cotton-tree (*Muh-mien*, Bombax Ceiba). It is met with in quilled or shrivelled pieces of some four or five inches in length. The brown, roughened cuticle is often removed in greatest part, exposing the dark brown liber. On breaking the bark, and drawing the fractured edges asunder, a delicate, silvery, silky fibre is seen, which may be drawn out to the length of almost an inch without breaking. The leaves of this tree are eaten when young. The fruit is astringent. The wood was formerly used to make pattens. Tonic, invigorating, and arthritic qualities are ascribed to the bark, which is given in spermatorrhœa, excessive perspirations, and in puerperal diseases.

**EUPHORBIA.**—大 戟 (*Ta-kih*).—The acrid, poisonous roots of this purgative plant are brought to Hankow from T‘ung chau in Kiangsu, and from Honan fu in Honan. The stem yields a milky, acrid juice, said to cure the toothache. The branching, flexible roots are sold in small bundles, being attached to the rootstock. It is given as a purgative, or hydragogue in dropsies, and in coughs as an expectorant. It is also given as an emetic.

**EUPHORHIA CHAMÆSYCE.**—地 錦 (*Ti-kin*), 雀 兒 臥 單 (*Tsioh-rh-ngo-tun*).—Ch'u chau, in Nganhwui furnishes this creeping plant, which is little used at the present time. The juice is purgative and the whole plant would seen to have been formerly used, in combination with other drugs, in fluxes, and the topical treatment of impetigo, scabies, and other skin-diseases.

**EUPHORBIA LUNULATA.**—澤 漆 (*Tseh-ts‘ih*), 猫 眼 草 (*Miau-yen-ts‘au*).—This "Cat's-eye" Euphorbia is so called from some fancied resemblance of the leaves to the eye of the cat. The young shoots are said to be eatable. It is used in precisely the same diseases as the *Ta kih* above mentioned.

**EURYALE FEROX**—芡 實 (*Kien-shih*), 雞 頭 (*Ki-t‘u*).—This misnamed species of the order of water-lilies is much cultivated for the the sake of its stems, rhizomes, and seeds, all of which contain much starch, and are eaten by the Chinese, who also prepare a kind of dry biscuit, called 芡 實 糕 (*Kien-shih-kau*), from the meal of the kernels. The plant derives its name *Ki t‘u* ( Cock's head) from the resemblance of the flower to the Cock's comb The large, pear shaped, indehiscent fruit, are many-celled and full of oval seeds, compared aptly enough by the Chinese to the eyes of fish. They are of a reddish colour, mottled, and veined with a whitish marbling, and pale at the hilum. The interior is white, hard and starchy, and has a roughish taste. All parts of the plant are officinal as tonic, astringent and deobstruent remedies. The square biscuits sold by the Chinese confectioners, are very commonly given to children suffering from the *Kan* disease.

**EXTRACT OF BELLADONNA.**—光 眼 膏 (*Kwang-yen-kau*).—The Chinese know nothing of this preparation. The name given here is coined, and is the equivalent of Belladonna, in some sense.

**EXTRACT OF CHAMOMILE.**—苦 菊 膏 (*K‘u-kiuh-kau*).—This name is coined. See *Chamomile.*

**EXTRACT OF DANDELION.**—還 少 丹 (*Huan-shau-tan*).—The tonic extract known by this name is said to renew the youth, hair and teeth of old men who take it!

**EXTRACT OF GENTIAN.**—龍 膽 膏 (*Lung-tan-kau*).—This name is adapted. See *Gentian.*

**EXTRACT OF GINSENG.**—人 參 膏 (*Jin-san-kau*).—This extract is carefully prepared in silver vessels. It is used to make the 再 造 丸 (*Tsai-tsau-huan*), or "regenerating pills," sold at two taels apiece in Hankow.

**EXTRACT OF LEONURUS.**—益 母 膏 (*Yih-mu-kau*).—See *Leonurus Sibirica.*

**EXTRACT OF LIQUORICE.**—甘 草 膏 (*Kan-ts‘au-kau*).—Although liquorice is much used by Chinese druggists, they never make an extract of it alone. This applies to many other drugs, so that compound extracts are more frequently met with in Chinese works. Foreign stick-liquorice would sell well in China.

**EXTRACT OF NUT-GALLS.**—玉 鎖 丹 (*Yuh-so-tan*).—A preparation made from the galls of the Rhus semi-alata, and China Root, and given in urethral discharges and spermatorrhœa, is called by this name "Jewelled lock." Duhalde speaks of an imperial electuary made from these galls, and held in great repute.

**EXTRACT OF NUX VOMICA.**—馬 錢 膏 (*Ma-ts'ien-kau*).—An extract, or rather a confection, made of powdered nux vomica seeds, is used by Chinese practitioners to bring on premature birth in cases of disease calling for this operation. Criminal abortion is becoming very common in Hankow. Extract of nux vomica is very useful in the treatment of chronic diarrhœa or dysentery amongst the Chinese.

## F

**FABA VULGARIS.**—蠶 豆 (*Ts'an-tau*), 胡 豆 (*Hu-tau*).—This, the common horse-bean, and the pea, are of foreign origin, having being brought from Central Asia by Chang K'ien, the ambassador of the Han dynasty. Parched beans are largely sold and consumed by the Chinese. They are held to be strengthening to the stomach, and quickening to the peristaltic action of the bowels. The shoots are boiled and given to the drunkard to recover him from dead drunkenness. Mr. Eitel in his "Hand-book" gives *Hu-tau* as the name of Phaseolus mungo.

**FALLOPIA NERVOSA.**—觧 寶 葉 (*Kai-pau-yeh*), 後 山 茶 (*Hau-shan-ch'a*).—A plant described as a tall shrub, found growing wild at Macao and Canton, and furnishing a tea-leaf, is called by these names by Loureiro and Bridgman.

**FENNEL.**—小 茴 香 (*Siau-hwui-hiang*).—See *Fœniculum dulce.*

**FERN ROOT.**—蕨 (*Kiueh*).—Both species of Nephrodium and Pteris are common in China, and are included under this name in the *Pen Ts'au.* The young shoots are eaten, and a kind of arrow-root is made from the rhizomes, which are also eaten in spite of their bitterness, after proper washing and cooking. The numerous substitutes for food in times of famine, mentioned in the *Pen Ts'au,* tell a sad tale of the distresses of the country, overpopulated as it is, in large districts. Demulcent, diuretic, soporific and vulnerary properties are reckoned by the Chinese as their only available use in medicine.

**FERN-SPORES.**—海 金 沙 (*Hai-kin-sha*).—A plant of some species of fern growing amongst trees, and adhering to their trunks to some extent, yields this "golden sea sand." It is an exceedingly light, fine, reddish-brown, powder, which burns almost as readily as lycopodium powder. It comes from Chang-sha fu in Hunan, as well as from Sech'uen and Chehkiang. It is given in fevers, in dysuria, hœmaturia and other urinary disorders. It is a cheap substitute for magnesia in the rolling of pills, worth using in Mission Hospitals.

**FICUS CARICA.**—無花果 (*Wu-hwa-kwo*).—The fruits of this "flowerless" tree, as the Chinese call the whole genus of fig-trees, with other trees mis-described by this name, are brought from Yang-chau fu, in Kiangsu, in large quantities. It is grown in Canton province, and the tree thrives well enough in Hupeh. Stomachic and corrective qualities are ascribed to this nutrient, laxative, and wholesome fruit, which is sometimes called 木饅頭 (*Muh-man-t‘u*). The leaves, thought to be slightly deleterious, are recommended to steam painful and swollen piles, commonly called hæmorrhoids.

**FICUS STIPULATA.**—饅頭羅 (*Man-t‘u-lo*), 木饅頭 (*Muh-man-t‘u*)—This species of fig-tree grows in the south of China, and is called 愛玉 (*Ngai-yuh*) in Formosa. The Ficus pumila would seem, from Mr. SAMPSON's account in the Chinese "Notes and Queries," to be called by the same names. They are sold as hard, dried, woody, immature, tasteless fruits, generally attached to their stalks, or sometimes separated, and cut into two, showing the characteristic fructification of the genus. These fruit are used to steam and foment painful piles. Mr. EITEL gives (Handbook of Chinese Buddhism), 優曇鉢羅 (*Yü-t‘an-poh-lo*), as the name of a tree, the Udumbara of the Buddhists, which is the Ficus glomerata, probably referred to under the Ficus carica in the *Pen Ts‘au*.

**FIR.**—松樹 (*Sung-shu*).—The fir-tree is met with on most of the hills of China, where the rebels or soldiers have not destroyed all the available timber. There are several species of Pinus, such as Pinus Sinensis (Lamb) P. Massoniana, P. Longifolia and perhaps Pinus Pinea 海松子 (*Hai-sung-tsz'*). These firs are to be distinguished from the China Pine 杉木 (*San-muh*), the Cunninghamia Sinensis of botanists. The fir-timber is used for fuel, piles, and flooring in damp places. The resin, wood, knots (松塔 *Sung-t‘ah*), branches, leaves, flowers, the pollen 松黃 (*Sung-hwang*) fruit, bark, &c., are all officinal as stimulant, antiphlogistic, astringent, anthelmintic, prophylactic, topical, and retentive preparations. A tincture of several of these substances is a favourite formula. A kind of Deodar Oil is used in skin-diseases, and in veterinary practice.

**FLAX SEED.**—胡麻子 (*Hu-ma-tsze*).—See *Linseed.*

**FLINT.**—火石 (*Ho-shih*).—Native flint-stones are yellow, or reddish in colour, and are brought from Hupeh, Shansi and other provinces. Flints are largely imported, as the foreign manufacture is much more handy. They are not mentioned in the *Pen Ts‘au*.

**FLUOR SPAR.**—紫石英 (*Tsze-shih-ying*).—This mineral is brought from Lien-chau fu, and Kwang-chau fu in Canton province, and fron Wu-ching hien in Chehkiang. It is sold in large, irregular, pieces of a green colour, veined with purple showing the octohedral crystalization. The substance is deflagrated, levigated, after washing with vinegar, and used as a cooling, sedative, and tonic remedy. It is given in sterility, lung-diseases and in chronic disorders. Specimens have been examined consisting of crystals of quartz, which are sold under this name.

**FÆNICULUM DULCE.**—蘹香 (*Hwai-hiang*), 小茴香 (*Siau-hwui-hiang*).—The stalks and leaves of this plant are eaten in China, but the seeds are in most frequent request as a condiment. The anise and this "sweet fennel" are confounded together in the *Pen Ts‘au*.

Some of the names denote a foreign origin. The common fennel fruit of the shops, called *Siau-hwui-hiang*, are greyish-brown, slightly curved, beaked, with five prominent ridges, and the characteristic aroma of the common fennel. It is used in dyspepsia, colic, and other abdominal disorders. The leaves and stems are similarly employed.

**FORSYTHIA SUSPENSA.**—連翹 (*Lien-kʻiau*).—The fruits of this Oleaceous shrub are sold in the form of the separated valves of the oval, brown, woody capsules, originally two-celled, and containing a few, dark, pendulous seeds having an aromatic taste. It is curious that the seeds are not officinal. The inert, woody, boat-shaped valves, about half an inch long and marked with a longitudinal partition on the smooth inner surface, are reputed to be anti-phlogistic, anti-scrofulous, laxative, diuretic and emmenagogue! The root is said to be slightly poisonous, and anti-febrile in its effect. The leaves are also officinal. The capsules are brought to Hankow from Shensi and other northern provinces.

**FOWL, DOMESTIC.**—鷄 (*Ki*), 燭夜 (*Chuh-yé*).—The Chinese names for the common fowl all refer to its crowing, which they say is regular all through the day as well as at dawn. Corea, and countries to the east of China seem to have furnished the breed. Honan furnishes the kind with feathered legs, called Cochin Chinese in England. A long-tailed variety from Corea, and several other doubtful descriptions of birds peculiar to different parts of China are mentioned. The Chinese having no means of reckoning time, pay special and superstitious regard to the crowing of cocks. The flesh of the male bird is said to be injurious, especially to those suffering from bad eyes, or from growths, or sores of any kind. This objection is more likely to depend on the fact that the cock is used in oaths and sacrifices, and is not to be slain on ordinary occasions. Black-boned fowls are called 藥鷄 (*Yoh-ki*), being much prized for making soup for those suffering from lung-diseases, and debility after hœmorrhages. Many other distinctions are made between the colour and sex of birds, as to their suitability, or otherwise, for particular classes of sick folk. Fowls' eggs, called 鷄子 (*Ki-tsze*), 鷄卵 (*Ki-luan*), or 鷄蛋 (*Ki-tan*), are largely consumed by the Chinese. The couriers or postmen take them nearly raw. Eggs are seldom boiled and eaten in the European fashion, unless sold in the streets for eating cold. Cordial, tonic, and many other fanciful properties are attributed by the Chinese to the albumen and yolk of the egg, which they compare to the sky and soil of the universe, respectively. The white of egg is applied like collodion to burns, sores and eruptions upon the head. Egg-shells 鷄殼 (*Ki-koh*), are burnt and pulverized, to be given in dysuria, and for use, topically, in scalled head. The Chinese fowl is subject to vesicular eruptions, called 水痘 (*Shwui-tau*), the chicken-pox of western countries. Eggs are procurable at a very moderate price all through the year in Central China.

**FOWLS' GIZZARD.**—鷄內金 (*Ki-nui-kin*), 肫皮 (*Chun-pʻi*).—The lining membrane of the gizzard of the common fowl is peeled off and dried, to produce this drug. The male bird is used for preparing the drug for female patients, and *vice versa*. This substance presents a wrinkled, or plicated surface, yellow or brown in colour, brittle in texture, and having portions of grain eaten by the fowl still adherent. It is prescribed in the *Kan* disease of children, dyspepsia, diarrhœa, spermatorrhœa and urinary disorders. Here the Chinese would seem to have anticipated the use of pepsine, which is prepared from the stomach of the pig at the present time in Europe. In the London Pharmacopœia, for 1721, the *Pelliculæ stomachi galliæ interiores* is given as a preparation which is precisely the same as the Chinese drug, now still in use. This formula did not appear in the Pharmacopaia of 1740.

**FOXGLOVE.**—毛 地 黃 (*Mau-ti-hwang*), 毛 原 (*Mau-yuen*).—These are prepared roots of a species of Digitalis, brought from Honan. They are named, prepared, and used in the same way as the Rehmannia roots, which see. The pieces are smaller and more fusiform than those of the *Ti-hwang*. Both the Digitalis and Rehmannia have downy leaves, so that this fact cannot be depended upon as a distinction.

**FRAGARIA VESCA.**—蛇 莓 (*Shié-mei*)—This common plant is the Wood Strawberry of Europe, remarkable in China for the rich red colour of its fruits, assumed to be poisonous, from the name "snake-bunch." The juice of these acid fruits is taken in fevers and in amenorrhœa, and is applied to burns, bites, and apthœ of the mouth.

**FRINGILLA AMANDUVA.**—梅 花 雀 (*Mei-hwa-tsioh*).—This Avadavat is a species of finch found in China and India, and kept in cages. It is about the size of a sparrow, of an olive brown colour, described as yellow by the Chinese, and marked in some varieties with red spots. It feeds on all sorts of grain. BUFFON calls it *Pinson de la Chine*, or Fringilla Sinica, after LINNŒUS. A similar bird sometimes called Tiskin, is the K. Sinensis of some naturalists. Its eggs are speckled. The bird is apparently called 黃 雀 (*Hwang-tsioh*), and is often described as a sparrow. The dung of the clean-feeding bird is called 白 丁 香 (*Peh-ting-hiang*) or "white cloves." 雄 雀 屎 (*Hiung-tsioh-shé*), and 青 丹 (*Tsʻing-tan*), are synonymes of this drug, which is said to be peptic, deobstruent, and detergent, and good for bad eyes. The stuff generally met with is the uro-fœcal excretion of the common sparrow.

**FULLER'S EARTH.**—五 色 石 脂 (*Wu-sih--shih-chi*).—There are several kinds of Lithomarge, described in the *Pen Ts'au* as detergent, absorbent and astringent. The red and dark varieties contain iron, and were formerly used to paint the eyebrows, and to make ink. They are unctuous to the touch, as is indicated by the Chinese name *Shih-chí*, which is the exact equivalent of Lithomarge, or "stone-marrow." See *Lithomarge*.

**FULLER'S SOAP.**—甘 土 (*Kan-tu*).—This is a kind of fuller's earth, brought from Shensi, Honan, and Pehchihli. It is used to remove grease from cloths, and is reputed to be an antidote in cases of poisoning by mushrooms and plants.

**FUMITORY.**—紫 花 地 丁 (*Tsze-hwa-ti-ting*).—Fumaria officinalis and F. racemosa are common weeds in China, having purple or white flowers. The herbage of these plants is used as an application to glandular wellings, struma, carbuncles and abscesses. It was formerly given internally in jaundice, and in cases of accidental swallowing of the beard of grain.

**FUNGUS.**—地 耳 (*Ti-rh*), 木 耳 (*Muh-rh*).—Fungi growing on trees ("woody ears") are preferred by the Chinese to the more delicate mushrooms. Many of the latter are apparently poisonous, or are at least very scarce, leading the Chinese to the same result. See *Mushrooms.*

## G

**GALANGAL FRUIT.**—(紅豆蔻).—See *Alpinia Galanga.*

**GALANGAL ROOT.**—(高艮薑).—See *Alpinia Galanga.*

**GALBANUM.**—阿虞 (*O-yú*).—This drug has been never met with in Chinese writings as a distinct drug. India, which supplied China from its kingdom of *Tsaukuta,* now the region around Ghuznee, in the N.W., with Hingu 形虞 (*Hing-yú*), or **Assafœtida,** may have sent both drugs. As the Galbanum is said to be the product of a Persian plant, the Persian name for assafœtida, given in Chinese in the *Pen Ts'au,* has been appropriated to the former drug, for mere distinction.

**GALLS.**—無食子 (*Mu-shih-tsze*), 沒石子 (*Muh-shih-tsze*).—These "fruits for the foodless" as the Chinese call these excrescences, produced upon a species of Oak-tree by the Cynips or Diplolepis insect, are said to have been really eaten for want of better food. The discription of the tree in the *Pen Ts'au* is very vague. Galls from Persia and Arabia have been long prized in China. The Persian name *Mazu* is fairly given in the *Pen Ts'au,* which frequently furnishes foreign names for drugs. Arabian countries would include much the same sources, as Aleppo in Asia Minor, from which the European market is still largely supplied. The Chinese are ignorant of the morbid character of these galls, which they suppose to be the fruit of the tree, alternating with the proper fruit. They direct the perforated nuts, which differ very little from those of the European market in appearance, to be used in medicine. They would seem to have been formerly used in making ink, and are known to be useful as a hair-dye. They are powdered and given in dysentery, chronic diarrhœa, nocturnal sweatings, seminal emissions, in tootahche, and in the *Kan* disease of children. They are applied to sores and skin effections as a stimulant and desiccant. Galls have been successfully employed in some parts of India, in very mild and chronic forms of intermittent fever. Gallic acid seems to have an antiperiodic effect in some such cases amongst Chinese patients, as frequently observed in Hankow.

**GAMBIER.**—檳榔膏 (*Pin-lang-kau*).—This "betel-nut extract" is the Pale Catechu of commerce, obtained from the leaves and shoots of a Rubiaceous plant, the Uncaria (Nauclea) Gambir, which grows in the Malayan Peninsula and the Indian Archipelago. Dr. WILLIAMS says that it is made "by boiling the leaves for five or six hours, until a strong decoction is formed. They are then taken out and strained above the cauldron. The extract is boiled almost to dryness, when it is cooled and the water drawn off. A soapy substance remains, which is dried and cut up." It occurs in cubes, or cakes, formed by the coherence of these cubes. They are about an inch square, porous, externally of a brown colour, and internally of a pale brick-red, or ochrish yellow. The pieces become much darker with age. Gambier is seven or eight times richer in tannin than Oak-bark, and is perfectly soluble in boiling water. The solution is bitter, astringent and slightly sweet in the after-taste. The decoction should not be very smooth to the taste, nor should it give a blue colour with iodine. The drug is imported into Shanghai from Singapore for dyeing purposes. It is not used in tanning at all in Central China. The drug called *Hai-rh-ch'a*, or *Wu-tie-ni*, consists of Pale Catechu in part. Its taste is much more pleasant than that of the Black Catechu, and it is more soluble, but it contains less astringent extractive. See *Catechu*.

**GAMBOGE.**—藤黃 (*Tang-hwang*, 蛇黃 (*Shié-hwang*).—This drug is understood to be "serpent-bezoar," a substance vomited up by serpents, analagous to the *Niu-hwang*, or Cow-bezoar. They also believe it to be the product of a species of rattan, analagous to the Tabasheer of the bamboo. It was formerly re-exported from China, after having been imported from Cochin China and Cambodia, but is now among the imports from Siam. This Siam. Gamboge has been proved by HANBURY to be the inspissated juice of the Garcinia Morella, var. Pedicellata Indian Gamboge, which may come to China, although it has not been met with here, all the specimens consisting of short, cylindrical pieces of a tawny yellow colour, is the juice of Garcinia Pictoria, dried in irregular masses. Ceylon Gamboge the product of the true Garcinia Morella tree, is a much coarser kind. A tree called 海藤 (*Hai-t'ang*), common in Hupeh and Hwnan is said to have formerly produced a gamboge-like substance called 沙黃 (*Sha-hwang*), or 蠟黃 (*Lah-hwang*). Chinese draughtsmen use Gamboge as a pigment, but it has no medicinal use here. The *Pen Ts'au* sensibly enough puts it down as poisonous, and gives it only the power to cause decayed and painful teeth to drop out, when applied to them. Gamboge is an excellent anthelmintic, but is too violent a remedy for the Chinese.

**GARCINIA MANGOSTANA.**—山竹果 (*Shan-chuh-kuo*).—The thick, fleshy rind of this delicious fruit, the Mangosteen of the south, is said to be an excellent astringent in cases of chronic diarrhœa and dysentery. It has been found useful in India as an external astringent application. Dyers are said by BURNETT to use it as a mordaunt for black.

**GARDENIA FLORIDA.**—山梔子 (*Shan-chi-tsze*).—The fruits of this shrub are met with as ovoid, smooth, six-ribbed, light or dark brown, or even black, berries, crowned with more of the calyx than the berries of the G. Radicans. They vary from half to one inch or more in length. The pericarp is very similar to that of the G. Radicans. The berries are much more generally used in medicine being given in fevers, fluxes, dropsies, lung diseases, jaundice, &c. and are used externally as a vulnerary remedy. The two species are not carefully distinguished in the *Pen Ts'au*. Emetic, stimulant and diuretic properties certainly belong to these drugs. The leaves enter into the composition of cosmetic preparations.

**GARDENIA RUBRA.**—紅梔子 (*Hung-chi-tsze*).—This is a species of Gardenia grown in Sech'uen, and said to have brilliant red flowers. The seeds are used to dye articles of an ochrish red colour.

**GARDENIA RADICANS.**—黃梔子 (*Hwang-chi-tsze*), 木丹 (*Muh-tan*).—These large, oblong, orange-brown, or yellowish berries are much cultivated in Ju-ning fu, and Nan-yang fu in Honan. They are from three-quarters of an inch to one-and-a-half inches long, strongly marked with six ribs which terminate in the remains of the superior, permanent calyx which generally crowns even the dried fruit of the shops. There are numerous seeds within the fragile, imperfectly two-celled pericarp, which is full of an orange pulp in the fresh fruit. The seeds are sour, and some what acrid, staining the saliva of a deep saffron yellow. These fruits are only used externally, the pulp being applied to swellings and injuries. They are more commonly used by dyers, the colouring principle, called Crocine, resembling the polychroite of saffron. The flowers are very oppressively fragrant, and are supposed to be used in flavouring tea. A Gardenia grandiflora is spoken of by LOUREIRO as a native of Cochin China. This is the 越桃 (*Yueh-t'au*) of the Chinese and is merely a variety of Gardenia Radicans.

**GARLIC.**—蒜 (*Suan*).—See *Allium sativum.*

**GARNET.**—紅砂 (*Hung-sha*).—This is a mineral substance described by HANBURY as a "coarse, reddish-brown stone, which, when examined by a lens, is seen to consist of transparent, angular fragments, mostly of a pale, pinkish hue, mixed with some of a yellowish-brown, or more rarely greenish-black. S. Gr. 3.818." GUIBOURT sets it down as aluminous, and akin to garnet. A substance sold under this name in the Hankow drug-shops, and said to be capable of removing opacities of the cornea consisted of cinnabar. Garnets, or Jacinths, are found in the Lu-shan, a range of mountains in Kiangsi, not far from Kiukiang. See *Grenatite.*

**GELATINE.**—魚膠 (*Yú-kiau*), (鰾膠 (*P'iau-kiau*).—See *Isingluss.*

**GENDARUSSA.**—秦艽 (*T'sin-k'iu*).—The drug sold under the name is brought from Liau chau in Shausl, and from places in Honan. It is in the form of dried, twisted, wrinkled, brown roots, varying a good deal in size. These roots, doubtfully refered to the Justicia Gendarussa of botanists, have a very bitter taste. They are boiled with milk, and given in rheumatism, dysuria, fever, jaundice and in carbuncle. Diphoretic and diuretic properties belong to this root, without doubt.

**GENTIAN.**—龍膽草 (*Lung-tan-ts'au*).—This "dragon's gall plant" is probably the Gentiana asclepiadea of botanists, with other speciee. The Chinese term is applied to any intensely bitter plant, but there is no need for any confusion between this plant and the *Hwang-lien*, the Justicia of systematic writers. The long, reddish-brown, numerous rootlets sold in the shops as *Lung-tan-ts'au*, are attached to a short, twisted, rhizome, which is seen on section to be much closer, and more of a brown colour then the European gentian-root. The taste is agreeably bitter. It is brought from Hing-ngan fu in Shensi, and is prescribed in much the some cases as the Gendarussa. It is believed to be useful in nocturnal sweats, hæmaturia and in ophthalmia. All bitter medicines are set down by Chinese physicians as eminently antiphlogistic and anti-rheumatic in their healing qualities.

**GIN.**—荷蘭酒 (*Ho-lan-tsiu*).—This "Dutch spirit" is scarcely known to the Chinese. The Pekingese make a spirit much stronger, but something like gin. It is flavoured with some sort of berries which give it a pleasant flavour, and a greenish colour. It is made in Hupeh by northern people, and is called 碧綠酒 (*Pih-luh-tsiu*).

**GINGER.**—乾薑 (*Kan-kiang*), 白薑 (*Peh-kiang*).—The Chinese ginger grows in Hupeh and Kiangsi to a large extent, but is eaten largely in the green state as a condiment and corrective. It has a very fragrant smell, but is too sticky to make a very excellent preserve. Ginger sweetmeat (餹薑) is largely exported from the south of China. Dry ginger is not easily made from the Chinese root, as the skin does not so easily separate by maceration.

It is met with in flat pieces of an inch in length, much shrivelled and wrinkled. The taste is much inferior to that of the West Indian and other gingers. Stimulant, diaphoretic, stomachic, carminative, tussic, rubefacient and vulnerary properties are commonly referred to this drug, which is largely used in regular and domestic practice. Ginger is applied to the forehead and temples in headache, to the gums in toothache, and to the bites of aminals. It is said to have some good effect in opthalmia, and in epiphora, when applied as a wash.

**GINGKO.**—銀 杏 (*Yin-hang*), 白 果 (*Peh-kwo*).—Gingko, or Jingko, is a Japanese name formed from *Yin-kwo* ("silver fruit,") the seeds of the Salisburia adiantifolia, a Taxaceous (Yew) tree of great beauty. It has been introduced into Europe for some years, and its yellow, fine, plum-like fruits sometimes ripen in warmer latitudes of the Continent. They are resinous, bitterish, and astringent. The "white fruit," or *Peh-kwo* of the shops are the nutlike, oval, pointed seeds, from three quarters to an inch long, keeled lengthwise on two sides, and having a whitish brown, smooth, hard shell. The kernel consists of two yellow, mealy cotyledons, covered with a beautiful, thin, reddish membrane. The Chinese consume these nuts at weddings, the shell being dyed red. They have a fishy taste, and are supposed to benefit asthma, coughs, irritability of the bladder, blenorrhœa and uterine fluxes. They are said to be peptic and anthelmintic, and are similarly used by the Japanese to promote digestion. They appear to cause peculiar symptoms of intoxication, and occasionally to destroy life. They are sometimes used to wash clothes, and are digested in wine, or oil, to make a kind of detergent cosmetic. The pulp contains a peculiar, crystallizable, fatty principle, called by chemists Gingkoic acid. The wood of the tree is made into seals, which are used by quacks as charms in the treatment of diseases. Those brought from Lin-kiang fu in Kiangsi, and from Siuen-ching hien in Nganhwui, are esteemed to be the best. They are not much used here at the present time.

**GINSENG.**—人 参 (*Jin-san*), 黄 參 (*Hwang-san*), 神 草 (*Shin-tsʻau*).—This far-famed drug is the root of an Araliaceous plant determined by Meyer to be a distinct species, the Panax Ginseng. The American Ginseng (洋 參) is the product of Panax quinquefolium, and is largely used in Central China. There is an Indian species, described by Dr. WALLICH as a native of Nepal, and referred by him to a Panax Pseudo-ginseng. The latter closely resembles the Chinese root. This drug is the cinchona of China, and is brought from Fung-tʻien fu in Shingking, and from Tsun-hwa chau in Pehchihli. 遼 參 (*Liau-san*), brought from Liau chau in Shansi is said to be a Ginseng. Formerly two classes of this drug were sold, the 關 東 人 參 (*Kwan-tung-jin-san*) from Manchuria, now represented by that coming from Shingking, and the 關 西 人 參 (*Kwan-si-jin-san*), which came from 上 黨 (*Shang-tang*), in Shansi, answering to the Lu-ngan fu of the present day. The latter class of drug, although the name is still retained, is represented by species of Campanula and Adenophora, called 黨 參 (*Tang-san*), used in the place of the real Ginseng. The plant is probably cultivated in Corea or Pehchihli to satisfy the great demand for it, the Shingking drug being almost entirely an imperial monopoly. Corean Ginseng (高 麗 參) ranks next after the Manchurian supply, and in fact constitutes the only available drug in the hands of traders. This is, however, often adulterated with Japanese Ginseng, which is often itself adulterated with roots of Campanula glanca, &c. The root is carefully hunted for by Manchus, who boast that the weeds of their country are the choice drugs of the Chinese. The pieces after careful trimming with a bamboo-knife, and drying in still air are made to assume somthing of the form of the human body. They generally do resemble a miniature human hand, the larger pieces being of the size of a man's little finger, with some two to four finger-like branching rootlets. They are yellowish, semitransparent, firm, brittle to some extent, and of a sweet, mucilaginous taste, accompanied with a slight bitterness. The drug is usually prepared for use by steaming and finishing off, so as to approximate its appearance to the normal standard of clearness. Fabulous stories are told of the finding of special depots of this root, which is associated with guiding voices, stars and other good and peaceful omens. Countries called *Sin-lo* and *Peh-tsi*, absorbed into Corean, or Chinese territory, and many parts of provincial China, such as Fuhkien, Kiangnan and Shansi, formerly yielded Ginseng. Their stock would seem to have been exhausted, or a plan of cultivation by seed, described in the *Pen Ts'au*, might have been given up, in the face of the growing fashion in favour of the Manchurian wild plant. The trade in the drug is a speciality. Great care is required to preserve choice specimens from the effects of damp and the attacks of worms, to which the drug is very liable. This drug is prepared as an extract, or as a decoction, in silver vessels as a rule. Its effects are apparently those of an alterative, tonic, stimulant, carminative and demulcent nature. It is prescribed in almost every description of disease of a severe character, with few exceptions, but with many reservations as to the stage of the disease in which it may be administered with the greatest benefit and safety. All forms of debility, spermatorrhœa, the asthenic hœmorrhages, the various forms of severe dyspepsia, the persistent vomiting of pregnant women, malarious affections of a chronic character, the typhoid stages of fevers, especially of an epidemic character, are occasions in which the Chinese resort to this drug. Several cases in which life would seem to have been at least prolonged by the taking of doses of this drug, so as to allow of intelligent disposition of property, indicate that some positive efficacy of a sustaining character does really exist in this species of Ivywort. The leaves (參 蘆), are sold in bundles of the green, fragrant, excellently-preserved foliage of the shrub. They are said to be emetic and expectorant in their effects.

**GINSENG, (BASTARD)**—黨 參 (*Tang-san*).—Several species of Campanulaceæ, such as Adenophora, Campanula and Platycodon have been, and are still, largely used to adulterate, and to replace the genuine Ginseng. The Japanese seem to put as much faith in the Campanula glauca as in the Chinese drug. Species of Phyteuma are also apparently to be classed with these substitutes, or sophistications. The roots of those plants are much more open than the worst specimens of Ginseng, all of which have a much sharper, and more aromatic flavour. Much of the Ginseng has been already exhausted, and again dried for re-selling. The full name of *Tang-san*, should be 上 黨 人 參 (*Shang-tang-jin-san*), formerly applied to the Ginseng from Lu-chau fu, in Shansi.

**GINSENG (BLACK)**.—玄 參 (*Hiuen-san*), 黑 參 (*Heh-san*).—The black, fleshy roots sold under these names have some resemblance to Ginseng. The first name ***Hiuen-san*** is after written 元 參 *Yuen-san*, as it entered into the composition of that of the Manchu emperor KIAK ING. It is grown in Ho-chau (Nganhwui), and in the northern and north-western provinces. The plant is said to have a square stem, some five or six feet high, and serrated, woolly leaves. A white and a purplish flowered variety are met with. The roots are about three or four inches long, and nearly an inch in diameter in the middle, tapering off to either end. They are brown externally, and very irregularly furrowed and wrinkled. They are fleshy and dark internally, and moist in fresh samples. Some of the roots are branched and jointed. Although this root is said to be used by incense-makers, it has very little smell, and the taste is raw and sweetish. It is very liable to be attacked by worms. This plant resembles *Ti-hwang*, or Rehmannia, in its botanical and medicinal characters. It is prescribed in much the same cases as the *Ti-hwang*, as an alterative, tonic, antiscorbutic, and eliminative remedy.

**GLAUBER'S SALTS.**—元 明 粉 (*Yuen-ming-fen*).—See *Sulphate of Soda.*

**GLEDITSCHIA CHINENSIS.**—皂 角 (*Tsau-koh*).T—hese dark, dry, table-knife-like pods are the fruit of what LOUREIRO called Mimosa fera, a Leguminous tree met with in China and Cochin China. These pods also called 皂 莢 (*Tsau-kiah*), are from eight to twelve inches long, and are much thinner and drier than those of the Acacia concinna, the *Fei-tsʻău-kiah* of the Chinese. They contain many flat brown seeds, and are used in bathing, and in washing clothes. They are not used in medicine to any extent here, but are set down in the *Pen Tsʻau* as expectorant, emetic, purgative and generally useful in a multitude of diseases. The seeds and pods are used in the shape of a bolus as an antidote in cases of metallic poisoning. The coarse powder is blown into the nostrils, or put into the rectum of the victims of accidental drowning and hanging. It is said to extract the water, and to open the passages of the body. The spines which cover the tree, called, 皂 刺 (*Tsau-tʻsze*), are taken as an anthelmintic internally, and are supposed to have considerable power in discussing various tumours and growths. The leaves and bark of both the stem and the root are officinal in the treatment of skin diseases. These drugs were all in much request during the Ming dynasty. A kind of algaroba is referred to under *Tsau-koh*, or Gleditschia, in the *Pen Tsʻau*. It is called 猪 牙 皂 莢 (*Chü-ya-tsau-kiah*), and is referred by HANBURY to Prosopis. See *Prosopis Algaroba.*

**GLUE.**—黃 明 膠 (*Hwang-ming-kiau*), 牛 皮 膠 (*Niu-pʻi-kiau*).—This is common glue, made from cow-hide, used to adulterate *O-kiau*, called Asses' Glue. It is recommended as a demulcent, tussic, astringent, tonic, vulnerary, and nourishing remedy. Hœmorrhages, and urinary disorders are treated with this substance dissolved in warm water, and a kind of plaster is made for topical application as a mode of treating fractures as well as wounds. Glue is not so much used in joining articles together as the very excellent pine-resin of the Chinese (松香), almost equal to mastich as a gum.

**GLYCERINE.**—甜 油 (*Tʻien-yú*).—This name of "sweet oil" is coined as a fair description of this very useful agent.

**GOLD.**—金 (*Kin*).—This metal is met with in the sands of the Upper Yangtsze, sometimes called the Kin-sha-kiang, or "Gold-sand River," in the highest part of its course in

Chinese territory proper, in those of the Min river in Sech'uen, and in very many of the small streams near Chefoo, in Shantung, according to the researches of the Rev. A Williamson. The island of Hainan (Kiung-chau fu), Shau-king fu and Lien-chau fu in Canton province, Liu-chau fu, Sz'-ngan fu and Sinchau fu in Kwangsi, Yung-chang fu, Yung-pch ting, and Tung-chuen fu in Yunnan, and T'ung-jun fu and Tsun-i fu, in Kwei-chau, all yield gold at the present time. Hunan province formerly supplied gold. Gold is met with in large quantities in the vallies of Thibet, according to Mr. T. T. Cooper. Indian gold called 蘇伐羅 (*Su-fah-lo*), Persian, Cambodian and Corean gold are referred to in the *Pen Ts'au.* Gold-dust (金屑) is directed to be given in choreic, cardiac, pulmonary and arthritic diseases. 金漿 (*Kin-tsiang*) an Oxymel of Gold of uncertain composition, said to be an Elixir Vitœ. 金箔 *Kin-poh*, or Gold-leaf is roughly made in China and largely exported to India, according to Dr. Williams. It is used for suicidal purposes, the metal swallowed producing mechanical irritation and death. Solid gold is also swallowed with similar objects and results. Gold needles are used in acupuncturing for certain diseases, and a hot gold needle is thrust into the gums for the relief of toothache. It is curious to remark that in direct opposition to European observers, gold is said in China to be a remedy for mercurial salivation. Gold articles are directed to be applied to the skin to draw out, and amalgamate with the mercury. It is also taken internally as a remedy in bad salivation.

**GORSE.**—黄蒺藜 (*Hwang-tsih-li*).—A species of Ulex, or Furze, is apparently called by this name. The flower of this beautiful plant is also included under the descriptive name 金雀花 (*Kin-tsioh-hwa*), or the "Golden bird-flower." See *Broom.*

**GOULARD WATER.**—鉛霜漿 (*Yuen-shwang-tsiang*).—This name for the well known solution of the Diacetate of Lead, named after a French naval surgeon, is adapted to express what will be quite intelligible to a native student of the *Pen Ts'au.*

**GRAINS OF PARADISE.**—縮砂仁 (*Shuh-sha-jin*).—These are the aromatic seeds of the Amomum Xanthioides, and the similar fruit of the Elettaria Cardamomum, or at least, according to Dr. Waring, of the Ceylon variety of the Malabar Cardamom. Dr. Williams gives their Chinese name as 細砂荳 (*Si-sha-tau*), and their botanical source as the Amomum grana-paradisa. They are used medicinally here as stomachic and stimulant remedies. Those from Siam are said to be the best of the imported kinds.

**GRAPE.**—葡萄 (*P'u-t'au*).—The grape-vine, existed in China Proper from very ancient date, but has been re-introduced from Fergana, Ladak and other countries at various periods, and most notably by the veteran Chang K'ien of the early Han period. A wild plant, the Vitis Amurensis of Ruppius, is said to be identical with the Vitis vinifera of Linnœus. There is a Vitis Indica according to Lindley, and there may have been an inferior kind of grape, the Vitis Sinica, more especially as the old Herbal of *Shin-nung* contains an account of the vine. Very interesting particulars about the Grape-vine in China are given by Mr. T. Sampson in No. 4 of the Chinese N. & Q. for 1869. Shun-t'ien fu, the metropolitan prefecture, T'ien-tsin fu, and Siuen-hwa fu, in Pehchihli; P'ing-yang fu, Ning-wu fu and Kiai chau, in Shansi province, yield notable quantities of grapes. Green grapes are grown in Sech'uen and Fuhkien provinces, and a very excellent sultana raisin (白葡萄) is brought from T'ientsin and sold in Hankow shops, at a considerable price. Some prejudice would seem to exist against the grape, as it is very little cultivated in parts of China where its growth is a matter of no care or cost. The grape is held to be nutrient, antifebrile, antiscorbutic, laxative and diuretic. The leaves, tendrils and roots of the grape-vine are given in rheumatism, dropsy, dysuria and abdominal disorders. See *Wine.*

**GRAPPLE.**—釣篠 (*Tiau-t'ang*).—See *Uncaria.*

**GRENATITE.**—紅砂 (*Hung-sha*).—This is a prismatic garnet, found in talc, or mica slate. It is infusible, and answers to HANBURY'S Garnet.

**GREWIA ELASTICA.**—棠梨 (*T'ang-li*).—Several species of this Tiliaceous genus, which bears wild bullace-like fruit, are met with in China. The wood is made into bows, and the berries, leaves and young branches are officinally recommended in dyspepsia and diarrhœa. A kind of pear is known by this name, and the berries of the Mountain Ash are called by the same name.

**GREY POWDER.**—水銀散 (*Shwui-yin-san*).—This name "mercurial powder" is borrowed from Dr. HOBSON, whose terms are adopted as often as possible, to ensure uniformity.

**GROUND NUT.**—落花生 (*Loh-hwa-sang*).—This Leguminous plant, the Arachis hypogœa of botanists, has been introduced into China in very recent times, as no account of it is met with in the *Pen Ts'au Kang Muh.* It is grown in poor and sandy soils all over Hupeh. It came to Central China from Fuhkien and Canton, and the nuts are baked and eaten on a very large scale in Hankow. They are thought to be demulcent and pectoral. Very little is known here of their capability of yielding an oil, which is said by Dr. WARING to be a most excellent substitute for Olive oil. See *Oil of Ground Nuts.*

**GUAVA.**—番惗 (*Fan-nien*), 番石榴 (*Fan-shih-liu*).—This delicious fruit of the Myrtaceous tree, the Psidium pyriferum of Linnœus, is not known here. The bark of the root is said by Anglo-Indian writers to be very serviceable in the treatment of chronic infantile diarrhœa. The Red Guava Tree, the Psidium pomiferum, possesses similar astringent properties The *Pen Ts'au* possibly contains these fruits, but they have not been met with hitherto.

**GUM ARABIC.**—樹膠 (*Shu-kiau*).—This term "tree-gum" is originally applied in Chinese works to the gummy exudation of plum-trees. It is used as a soothing, demulcent, and discutient remedy in opthalmic and surgical practice. Its composition is much the same as that of Gum Tragacanth, and it may be used for the same purposes. This term is used here for the Gum Acacia of European pharmacy.

**GUM LAC.**—紫鉚 (*Tsze-kwang*), 赤膠 (*Ch'ih-kiau*), 紫梗 (*Tsze-kang*)—A very inferior kind of Stick-lac, or Shellac, the product of a species of Erythrina, a Leguminous plant, is imported into China, under the trade-name of 紫草茸 (*Tsze-ts'au-jung*). It very much resembles small ears, having been moulded upon the small branches of the tree upon which the Lac-insect, the Coccus Lacca, produces this resinous secretion. It is rather a description of Seedlac, but is commonly believed to be the dung of sanguinary mosquitoes. It is used in medicine as an astringent, styptic, and alterative remedy internally, and as a wash or plaster to unhealthy sores. It is used as a dye, as a face-powder, and as a varnish. It enters into the composition of the best Chinese lacquer-work, gamboge or dragon's blood, with copal, being added to increase the colour, according to Dr. WIEDERHOLD. The tree called 渴稟 (*K'oh-pin*), is said to be met with in the south of China, in Cambodia, Cochin China and other countries to the west of China. The resemblance of the insect to the Coccus pela is pointed out in the *Pen Ts'au.* Mr. EITEL understands this substance to be the gum of the Butea frondosa, which is the Bengal Kino of commerce. He also gives in his "Hand-book of Buddhism" the name 曼陀羅 (*Man-to-lo*), usually applied to the Datura, to the genus Erythrina. Two substances are perhaps referred to under this name. See *Kino.*

**GUNPOWDER.**—火藥 (*Ho-yoh*).—Chinese gunpowder, or "fire-drug," made from nitre, sulphur, and the charcoal of the Cunninghamia excelsa, is mentioned in the *Pen Ts'au.* It is very nearly of the composition and proportion of English powder. It is described as deleterious, an expression which may be allowed to pass. It is put down as vermifuge, prophylactic and detergent in its properties.

**GYNOCARDIA (CHAULMUGRA) ODORATA.**—大風子 (*Ta-fung-tsze*).—See *Lucraban (Chaulmugra) Seeds.*

**GYPSUM CAKE.**—石膏 (*Shih-kau*), 細理石 (*Si-li-shih*).—This substance, the sulphate of lime of chemists, is met with in the district of Ying-ching, in Teh-ngan fu, and at Yun-yang fu, in the same province of Hupeh. In the former place it is associated with hot springs, and the mineral is still depositing. Mei chau in Sech'uen, Ts'u-hiung fu in Yunnan, and Tang chau in Shantung also yield this mineral which is profitably exported. A pinkish variety is said to be met with, but the Chinese evidently confound the carbonate of lime, or calcareous spar, with the sulphate. It is reputed to be antiphlogistic, anti-rheumatic, astringent, alexipharmic, desiccant and vulnerary. It is said to increase the flow of breastmilk, to relieve incontinence of urine, and to be useful as an application, in the form of powder, to burns and scalds. The mineral is largely used as an ingredient in the bean-curd of ordinary diet. It enters into the composition of some sorts of putty, and is used to give rice a whiter face, after hulling and preparing it for sale. See *Plaster of Paris,* and *Hartal.*

## H

**HÆMATITE BROWN**:—禹餘糧 (*Yü-yü-liang*).—The round, oval concretions, large as a goose-egg, brought from Tseh-chau fu in Shansi, and from places in Shantung, are specimens of hydrated peroxide of iron, or Brown Hæmatite. They have a central nucleus, with a scaly fracture, and a rufous yellow streak and powder. They are connected with some legend of the great Yu, whose name they bear. They are supposed to be the crumbs from his table! Smaller concretions are also described under this name in the *Pen Ts'au.* This ore of iron is calcined and treated with vinegar or salt, or levigated and used as a medicine. A tincture is also made of it, and it is combined with Lithomarge. It is reputed to be tonic, alterative, arthritic, antifebrile, astringent, styptic and tussic in its properties, which are turned to very little account at the present time. Like the old Lapis Ætites, which it resembles, as HANBURY has pointed out, it is said to have some action upon the uterus.

Hæmatite (Red).—See *Bloodstone.*

**HALIOTIS FUNEBRIS.**—石决明 (*Shih-kiueh-ming*), 鰒魚甲 (*Fuh-yü-kiah*).—These shells of a species of mollusk, first described by Messrs. CUMMING AND REEVE as a New Holland species, is the Haliotis Iris of older writers, met with on the coasts of Shantung, Fuhkien, and Kwangtung. They measure commonly four inches broad by five inches long, and are smooth and iridescent on the inner surface. Shells with seven or nine foramina are in greatest repute. The rough external layers are rejected, and the pearly portion is ground, levigated and applied to opacities of the cornea, and to the films of pterygium, to which Chinese eyes are so subject. It is also prescribed as a cooling, and antilithic nostrum.

**HARTAL.** —石黃 (*Shih-hwang*).—Native orpiment from Yunnan, and also from Burmah, is called by this name. It is used in Oude and other parts of India as a poison and a drug. It is placed by Dr. WILLIAMS amongst Chinese exports. Dr. WARING has lately called attention to the fact that this Hindustani name Hartal is applied, in India, to a powder much used by the natives as an antiperiodic. It consists, in most cases, of nothing but selenite, or sulphate of lime, which has been incinerated with fresh aloe-juice.

**HARTSHORN.** —鹿角 (*Luh-koh*), 鹿茸 (*Luh jung*).—The horns of the deer, elk, the Elephurus Davidianus, and other species of these genera hold the same important place in the Chinese Materia Medica as they did formerly in all European Pharmacopæias. They are procured for medical purposes, and for exportation, from Tai-wan fu in Formosa, Mau chau in Sech'uen, Han-chung fu and Hing-ngan fu in Shensi, Kiai chau and Ts'in chau in Kansuh, Fungt'ien fu in Shingking, and from Siuen-hwa fu in Pehchihli. They are sorted as "old" and "young." The *Luh-jung* is the softer, internal part of the best horns used to make into pills, after careful drying and grinding into coarse powder. The inferior horns and the rejected pieces are boiled to make a jelly. A tincture is also made from the horns. Stimulant, diaphoretic, tonic, antiperiodic, alterative, astringent, and many other doubtful properties are assigned to this substance, which is the medicine of the wealthy. Nymphomania, set down as "spiritual intercourse," is one of the diseases, often mentioned in Chinese writings, supposed to be benefited by a course of hartshorn. Burnt hartshorn is directed to be used on the *Pen Ts'au* as an ointment made up with lard. It contains a large proportion of phosphate of lime, and may have some good effect in children's diseases.

**HARTSHORN-JELLY.** —白膠 (*Peh-kiau*), 鹿角膠 *Luh-koh-kiau*).—This is a kind of glue, made from deer's horns. It is brought from Shun-t'ien fu in Pehchihli, Yung-peh ting in Yunnan, and from Shen chau in Honan. It is something like the Asses' Glue in appearance, but rather paler in colour. It is recommended in debility fluxes, and hœmorrhages, and is often taken after general bruising and shaking, from accidents.

**HARTSHORN SHAVINGS.**—鹿茸片 *Luh-jung-p'ien*).—Hartshorn is sometimes dried artificially, and cut up into shavings, or sawn into thin sections, for special uses. A coarse powder called 鹿角霜 (*Luh-koh-shwang*), is a favourite remedy in spermatorrhœa, hœmaturia, and incontinence of urine. It serves to make the white Decoction of Sydenham, a very useful remedy for weak, rachitic children, from the phosphate of lime in the horn.

**HAZEL**—榛 (*Tsin*).—The fruit of a Corylus, or a kind of hazel or filbert, is brought from Siuen-hwa fu in Pehchihli, Fung-t'ien fu in Shingking, and from Fu chau and Fung-tsiang fu in Shensi. They are used in making confectionary, and are esteemed to be very wholesome eating. Two varieties are described in the *Pen Ts'au.*

**HEDGEHOG.**—猬 (*Wei*).—The Centetes Illiger, or Tenrec, and the common hedgehog are mixed up together in the account given in the *Pen Ts'au.* Mr. SWINHOE has recently described a new species of hedgehog in China, which he calls Erinaceus dealbatus. The snout of the hedgehog (猬皮) is used in medicine. A common name for the hedgehog in Hupeh is 刺猬宅. See *Centetes Illiger*.

**HEDYSARUM.**—地榆 (*Ti-yü*).—Several species of this Leguminous plant are found in China. The long, tough, wrinkled, fibrous root is brown externally, and of a pink, or yellowish colour internally. It is astringent and slightly bitter to the taste, and is used as a styptic, astringent and vulnerary medicine. The leaves are sometimes used as a vegetable, or as a substitute for the proper tea-leaf. The root comes largely from Hang-chau fu in Hunan.

**HELLEBORE BLACK.**—藜蘆 (*Li-lu*).—See *Veratrum Nigrum.*

**HEMEROCALLIS GRAMINEA**—萱草 (*Hiuen-ts'au*).—This species of Day-lily, identified by TATARINOV, has been known for ages as a drug or charm for dispelling grief, and is supposed to favour the birth of sons when worn in women's gridles. The young leaves are eaten, and appear to intoxicate, or stimulate to some extent. The flowers are dried to produce the 金針菜 (*Kin-tsin-ts'ai*), or Lily-flowers, which see. The root is diuretic, and is given in dysuria, lithiasis, dropsy, jaundice, and in piles. The deer is said to feed upon the tubers, sometimes named after it.

**HEMP-FIBRES.**—呂宋麻 (*Lu-sung-ma*).—See *Agave Americana.*

**HEMP-FIBRES.**—麻 (*Ma*).—The word for hemp is associated in the *Pen Ts'au* with the names of about a dozen different plants. The name is sometimes given from the rough resemblance of the particalar plant to the typical Urticaceous, or Malvaceous species of hemp-producing plants. See *Agave Americana*, *Bohmeria*, *Corchorus pyriformis*, *Dolichos trilobus*, *Jute*, *Hibiscus cannabinus Sida*, *Urtica tuberosa*, *Triumfetta.*

**HEMP, INDIAN.**—麻藥 (*Ma-yoh*).—This is mentioned by TATARINOV in his list, but the drug has not been met with or heard of here Happily the Chinese have been saved from any intimate acquaintance with the properties of Churrus, or Gunjah. The term here taken from TATARINOV's list occurs in a passage of the *Pen Ts'au*, referring to the Datura, which is there directed to be combined with the seeds of the Cannabis sativa var. Chinensis. The Extract of Indian Hemp may be sometimes used in the treatment of opium-smokers, on giving up the latter drug.

**HEMP PALM.**—椶櫚 (*Tsung-lü*), 栟櫚 (*Ping-lu*).—The term *Tsung* has been proved by Mr. Sampson to be a general term for Palms, such as species of Livistonia, Chamœrops, Caryota and Raphis. The palm here alluded to as producing the useful fibre called Coir, which is made into cordage, clothing, trunks, brushes, &c., is the Chamœrops Fortuni, growing to the height of thirty or more feet in the south of China. It formerly extended nearly as far north as the Yangtsze. The fibrous integument is annually removed, and steeped in water to separate the wiry fibre. The bark itself may be used for purposes of support to diseased joints, instead of gutta percha. Excellent matting is also made from it, combined with more or less of the fibre itself. Fans are made from the large leaves of this palm. Astringent properties are attributed to almost every part of this tree. The clusters of young flower-buds are eaten in much the same way as bamboo-sprouts.

**HEMP-SEEDS.**—火麻仁 (*Ho-ma-jin*).—A variety or two of the Cannabis sativa is met with in China, described in the *Pen Tsʻau* under the names of 大麻 (*Ta-ma*), 黃麻 (*Hwang-ma*), 脂麻 (*Chi-ma*), and numerous other synonymes. The Linum and Sesamum are also spoken of as kinds of *Ma*, or "hemp," from the oily nature of their seeds. From the use of the word (胡 *Hu*), in connexion with these plants we may gather that some of them were, perhaps, brought from the same Scythian tribes who taught the old Greeks the uses of the Cannabis. A diœcious, indigenous plant called 漢麻 (*Han-ma* or *Ta-ma*) was formerly much employed as a source of hemp. The dried flowers or fruits called 麻蕡 (*Ma-fan*), answered to the Bang or Gunjah of Indian writers, and was known to have deleterious properties. The stimulant properties are alluded to and its use in nervous diseases, uterine affections, and anœsthetic disorders indicated. The *Ho-ma-jin* are the small, shining, brittle achœnia of the Cannabis sativa, lenticular in form, and enclosing the white, oily albumen. The *Pen Tsʻau* assigns tonic, alterative, emmenagogue, laxative, diuretic, anthelmintic, and demulcent properties to these fruits, which are prepared in the form of pills, panada, tincture and paste. An oil prepared by means of heat and pressure from them is used as a hair-oil. The leaves are said to possess antiperiodic properties.

**HENNA.**—染指甲 (*Yen-chi-kiah*).—A term borrowed from the Arabs, who used an antimonial preparation to paint the features. It has been more generally applied to various vegetable substances such as the leaves or flower of Lawsonia alba, Impatiens balsamina and Ternstroemia Japonica, still generally mixed with mineral substances, such as lime or alum. A red or a yellow dye is imparted to the nails, which requires renewal. Sometimes only certain of the fingers are treated in this way. Lawsonia is used in the south, and the common balsam, called 海蒳 (*Hai-nah*), in the *Pen Tsʻau*, combined with alum in the north of China. In Egypt the Lawsonia is collected and used as a dye, and exported to Turkey, where it has similar uses, and is further employed to stain the manes and hoofs of horses. A circular spot of rouge or henna is often to be seen between the eyes of Chinese children, especially girls. There is a tradition to the effect that this mark was a sign of the separation of women during the "uncleanness" of menstruation. Much interesting matter upon the subject of henna will be found in the second volume of the Chinese Notes and Queries. See *Balsam* and *Lawsonia alba*.

**HERMODACTYLE.**—貝 母 (*Pei-mu*).—The corms called by this name, and so celebrated for their efficacy in soothing the pains of aching joints, were probably the corms of the Colchicum variegatum, according to the researches of M. PLANCHON and Dr. ROYLE. The Chinese drug called *Pei-mu* bears considerable resemblance to the Indian corms, of which there are two kinds, the bitter called *Surinjan tulk*, and the tasteless variety, called *Surinjan shirin*. They have been referred by HOFFMAN and SCHULTES to Uvularia (Disporum) grandiflora (Melanthaceœ), which see.

**HETEROPA ASAROIDES.**—細 辛 (*Si-sin*).—This species of Birthwort receives its Chinese name from the subacrid properties and the fine, fibrous character of its roots, the official part of the plant. It is collected in Fung-tʻien fu, (Shingking), Tʻung-chau fu (Shensi), and Fung-yang hien (Chehkiang). Its dark-brown leaves resemble those of the Asarum. The dried root is sold in the shape of fibrous radicles, having a strong, aromatic smell, and a subacrid taste. In the fresh state it is very acrid. Emetic, expectorent, diaphoretic, diuretic and purgative properties are apparently assigned to this drug in the *Pen Tsʻau*. It is largely prescribed in rheumatic affections, and in apoplectic seizures, followed by palsy. The coursely powdered root is directed in the *Pen Tsʻau* to be tried in cases of polypus narium, and in all cases of deafness. It makes an excellent snuff.

**HIBISCUS ABELMOSCHUS.**—冬 葵 子 (*Tung-kwei-tsze*).—The description of the Malvaceous plants in the *Pen Tsʻau* is not very clear, and the identification of the *Tung-kwei-tsze* with the plant which yields the Musk-seeds of the Chinese export-table, given in foreign books, is not at all certain. The seeds sold here under this name are small, dark, or reddish-brown, ear-shaped and mucilaginous. They, and the whole plant, are used as demulcent, lenitive, diuretic, laxative and discutient remedies. Puerperal diseases, urinary disorders, chronic dysentery and fevers are treated with the seeds.

**HIBISCUS CANNABINUS.**—苘 麻 (*Hiung-ma*), 白 麻 (*Peh-ma*), 野 麻 (*Yé-ma*). The woolly, cordate, acuminate leaves, and bristled carpels of this Malvaceous plant, producing hemp-fibres in the north of China, mark it to be an Hibiscus. It is a very common weed in Hankow, its black, reniform seeds being eaten by children. They are said to be useful in dysentery, and in the treatment of diseases of the eye. The root is similarly employed. The Sun hemp of India is known to be made from this plant.

**HIBISCUS ESCULENTUS.**—黃 蜀 葵 (*Hwang-shuh-kwei*)—The capsular fruit of this edible kind of mallow, called Ochro, with the mucilaginous root, is used as a demulcent, emollient, diuretic and discutient remedy. It is said to expedite delivery in cases of tedious labour, and is taken internally as a vulnerary, after injuries of every kind. Carbuncles, buboes and skin-diseases are treated, internally and topically, with all the parts of this plant. Dr. WILLIAMS gives this Chinese name as the identification of the Hibiscus manihot. 菟 葵 (*Tʻu-kwei*) and 蜀 葵 (*Shuh-kwei*), appear to be species of the Mallow tribe, having much the same properties and uses as the Hibiscus esculentus. Some of these plants are used in sizing paper in the arts.

**HIBISCUS MUTABILIS.**—木 芙 蓉 (*Muh-fu-yung*).—The name *Fu-yung* is given to the Nelumbium and to the Poppy, as well as to this beautiful flowering tree. Red is the general colour, but several very curious varieties of colour are mentioned in the *Pen Tsʻau.* The leaves are applied to swellings, and the flowers and leaves are prescribed in pulmonary diseases. This and most of the other species of Hibiscus, have been turned to account at various periods, as furnishing textile material for making cordage or cloth.

**HIBISCUS ROSA-SINENSIS.**—扶 桑 (*Fu-sang*), 佛 桑 (*Fuh-sang*), 朱 槿 (*Chü-kin*).—A great variety of opinions has been expressed as to the actual plant referred to in Chinese writings by this name of *Fu-sang.* The discovery of America by the Chinese has been assumed on the ground of some fancied resemblance between the description in Chinese works and the Mexican Aloe. The description of the fruit points very distinctly to a Sterculia, the columnar stamens of which resemble those of the Mallows. Several species of Sterculia yield excellent cordage, a textile property attributed to the *Fu-sang*, which is actually compared to a *Tʻung* tree, a name of the Sterculia platanifolia. On the whole it is probable that at least two or three plants are concluded under this one term. Reasons have been given under the article on Althœa rosea for believing that the *Fu-sang* is this plant, the gay Hollyhock. The *Pen Tsʻau* distinctly asserts that flowers of three different colours, namely red, yellow and white, are met with amongst plants of the *Fu-sang.* This cannot apply to the Hibiscus Rosa-sinensis, whose dark red petals communicate a blueish purple to paper, which is used in the place of litmus test-paper in India. The plant is sometimes called the Shoe-flower from the fact that a shoe-dye is made from the petals. The flowers and leaves of the *Fu-sang*, especially those of the white variety, are directed in the *Pen Tsʻau* to be mixed with honey and rubbed into swollen breasts, or applied to carbuncles. The petals of the Hibiscus Rosa-sinensis have been used in India in the form of an infusion, as a demulcent, refrigerant drink in fevers. See *Chinese Recorder*, October, 1870, *Fu-sang* by Dr. BRETSCHNEIDER. This tree is sometimes referred to in Chinese works as the 榴 花 (*Liu-hwa*).

**HIBISCUS SYRIACUS.**—木 槿 (*Muh-kin*).—The Malvaceous shrub, with its puce-coloured, fugitive flowers, is a common hedge-plant in Hupeh, being often chosen as a fence. It is readily propagated by slips planted in the ground. The leaves are sometimes made into tea, or eaten when young. The dried leaves are sold in the drug-shops, and are held to be stomachic, astringent, expectorant and diuretic. The seeds, bark and root are also officinal, the latter having some reputation in dysentery, and as an ingredient in certain washes for lepra, eczema, piles, and prolapsus recti.

**HOLCUS SORGHUM.**—高 粱 (*Kau-liang*)—The Barbadoes Millet of Central and Northern China is known by this name, and by that of Andropogon Sorghum, as a member of the order of Graminaceæ. It grows very readily, reaching to the height of several feet. It is not much grown in Hupeh. The plant is named after the old name for Sechʻuen, and has been known since the Han dynasty. The colour of the tassel connected with the flower varies, according to the *Pen Tsʻau*, making the yellow, white and other varieties of Kau-liang. The red seeds are used in Hupeh to make wine, the exhausted grains being a favourite food for pigs. In the north it is ground into meal, or made into a panada. Cooling, demulcent, diuretic and other qualities are referred to this grain, which is used in diarrhœa and urinary disorders. The stalks are used as fuel, or to repair the banks of large rivers.

**HOLLY.**—枸骨 (*Kau-kuh*), 刺樹 (*Ts'z'-shu*).—Several species of Ilex are met with in China. I. cornutum has been found near Ningpo, and I. aquifolium near Canton, according to Dr. HANCE. Berried holly can be procured all along the valley of the Yangtsze. The tree is also called 貓兒刺 (*Miau-rh-ts'ze*), and 六角刺 (*Luh-koh-ts'ze*), from the shape of the spinous, evergreen leaf. Tea, called 六角茶 (*Luh-koh-ch'a*), is made from the leaves, and the wax-insect is sometimes found feeding upon them. The wood is turned into small boxes, and the bark is boiled to produce a gum, which is used to snare birds. Tonic properties are ascribed to all parts of the tree.

**HONEY.**—蜂蜜 (*Fung-mih*).—Wild honey out of the rock is held in the highest esteem by the Chinese, who formerly called this and sugar by the same name (石蜜). The honey from Nanking is the whitest and best. Li chau and Yung-shun fu in Hunan, and Ngan-luh fu in Hupeh supply honey, that collected from the wild bee building in trees, as well as the domestic honey, being supplied. As the Chinese now depend upon the wax-insect for a large portion of the supply of their wax, they have directed less attention to the culture of honey of late. Pectoral, laxative, emollient and diluent properties are attributed to this useful household remedy. Honey is largely adulterated in China, the land of sophistication. It is imported, along with beeswax, from the Indian Archipelago to some extent. It is largely used in making up pills, and as a vehicle for unpleasant drugs. Honey is used as a salve for chapped hands, porrigo, roughness of the face, and is applied to the eye as a remedy in cataract!

**HONEYSUCKLE.**—忍冬 (*Jin-tung*), 金銀花 (*Kin-yin-hwa*).—The genera Caprifolium and Lonicera both exist in the Chinese Flora, but the names apply more correctly to the latter, the leaves of Caprifolium being deciduous. See *Lonicera.*

**HORSE-LEECH.**—水蛭 (*Shwui-chih*), 馬蟥 (*Ma-hwang*).—Several sorts of leeches are apparently to be found in China, including species of Bdella and Hirudo. Shantung yields notable quantities of these creatures, some of which are said to be a foot long? The Sanguisuga medicinalis of Savigny, or Speckled Leech, may be procured in large quantities. Queer stories are told of leeches, swallowed accidentally, breeding in men's bellies, and causing great pain, until mud and muddy water are swallowed, when they are said to be voided. Leeches are collected, dried, powdered and taken with spirit, or applied to bruises and injuries. Leeches are seldom applied to the skin to draw away blood, as they are supposed to inflict poisonous wounds. They are directed to be confined by means of a bamboo-tube over carbuncles and patches of phlegmonous erysipelas, to suck away the poisonous blood.

**HORSERADISH.**—辣根 (*Lah-kan*).—A species of Cochlearia, or Moringa, supplies the pungent root sold to foreigners, as a condiment, at the open ports. The plant is not officinal, so far as can be ascertained.

**HORSETAIL.**—木賊. See *Equisetum hyemale.*

**HOUSELEEKS.**—景天 (*King-t'ien*).—See *Umbilicus malacophyllus*, and *Sedum acre.*

These plants are grown in pots upon house-tops, with the idea that they ward off fires. The name here given is apparently that of the Sempervivum tectorum. The juice of the fleshy leaves is a common domestic remedy for external or internal use in eruptions, or for application to burns. The juice of some of these Crassulaceœ is used as a detergent hair-wash.

**HOVENIA DULCIS.**—枳椇 (*Chih-kü*).—The Rhamnaceous tree yielding the fruit-like, thickened branches, of a russet colour, and filled with a pleasant, yellowish, pear-like pulp, which has mislead many travellers; is the Hovenia dulcis of botanists. It is met with in Chehkiang, Kiangnan, Canton, Shansi, and Pehchihli. It is supposed to be a date by the people west of Peking, where they call it 枳棗 (*Chih-tsau*), the name incorrectly given to this tree by Tatarinov. It is met with in India, Nepal and Japan. Its Japanese name *Kimponass*, is the equivalent of 雞距子 (*Ki-kü-tsze*), or Cock's-claw fruit. Tree-honey, Tree Coral, White Stone Tree, and several other names may be given as translations of the synonymes of the tree, given at great length in the *Pen Ts'au*. The real fruits of the tree are small, dry, and pea-like, and are pendent upon the fleshy peduncles, which greatly increase in size at the time of their maturation. The seeds are flat, shining, resembling those of the Linseed, or the Rhamnus soporifer, and are of a dark red colour. They are sold under the name of 枳椇子 (*Chih-kü-tsze*). The fleshy, ripe peduncles are sold as grateful, laxative fruit, reputed by the authors of the *Pen Ts'au* to be very wholesome. The principal recommendation of this curious production of nature is its anti-vinous properties. It is said by both Chinese and Japanese authors to counteract the immediate and the subsequent effects of wine in a remarkable way. The bark of the tree is also officinal in diseases of the rectum.

**HUMULUS LUPUDUS**—覆盆子 (*Fuh-pw'an-tsze*).—Tatarinov gives this name as the identification of the common Hop plant, which is unknown here. This name *Fuh-pw'an-tsze* belongs to the wild raspberry, the Rubus idœus, clearly described under this name in the *Pen Ts'au*.

**HYOSCYAMUS NIGER.**—羊躑躅 (*Yang-chih-chuh*), 鬧羊花 (*Nau-yang-hwa*).—This identification suggested by Tatarinov is a possible one. Hankow samples of the drugs going by this name have consisted of flowers of Andromeda polifolia and Azalea. Narcotic, sedative and anæsthetic properties are referred to these flowers, which enter, with aconite-root, into the composition of certain benumbing applications, which take the place of chloroform, or ice-bags, in Chinese surgery.

**HYDRANGEA.**—洋繡球 (*Yang-siú-k'iu*).—This flower is cultivated in Chinese gardens as a foreign shrub, but is not known to be used medicinally. In Japan, according to Thunberg, tea is made from its leaves. It is sometimes confounded with the Viburnum opulus, or Guelder Rose, the "Snow-ball" of Chinese gardeners.

**HYPERICUM CHINENSE.**—金絲草 (*Kin-sze-ts'au*), 金絲桃 (*Kin-sze-t'au*.—The elliptico-lanceolate leaves, lanceolate sepals, 5-fid. stigma, and woody, round stem of this beautiful flowering plant, distinguish it from ordinary specimens of St. John's wort. It is a frequent ornament in shops here. It is credited in the *Pen Ts'au* with astringent, alterative and styptic properties.

# I

**ICTHYOCOLLA.**—魚鰾膠—See *Isinglass.*

**IGNATIUS'S BEAN.**—苦實把荳 (*K'u-shih-pa-tau*).—The seeds of this poisonous member of the deadly order of Loganiaceæ, the Ignatia amara of Linnæus, would appear to be known by this name to Chinese writers, but the drug has not been met with as yet. It is also sold, apparently, under the same name as the Nux Vomica Bean. The Chinese name, the "bitter Croton-fruit" denotes the resemblance of these rounded, or angular, seeds to the fruit of the Croton Tiglium. Hanbury describes certain seeds under the name of 呂松菓 (*Lu-sung-kwo*), which as sold here are the seeds of a Pinus (松), as the seeds of Strychnos Ignatia, imported from the Bisayas provinces of the Philipine Islands, where this tree is known to be common. There is same confusion here, evidently. If the fruits do come from Manilla (呂宋), they should be called 呂宋菓, *Lu-sung-kwo.*

**ILLICIUM ANISATUM.**—蘹香 (*Hwai-hiang*), 大茴香 (*Ta-hwui-hiang*), 八角茴香 (*Pah-koh-hwui-hiang*).—The fruit exported under these names is the product of a small Magnoliaceous evergreen tree, which grows in Yen-p'ing fu (Fuhkien), in Kwangsi province, and in Japan. They are called Aniseed Stars, or the Star Anise, from the radiate, star-like, arrangement of the eight follicles, which generally compose the fruit. Each of the follicles is compressed laterally, boat-shaped, roughened, and opens at the top, more or less, disclosing a shining, yellow, ovate, solitary seed in the smooth cavity. The star-fruit vary from one to one inch and a quarter in diameter. One or more of the carpels are often abortive. Within the brittle testa is a pair of shrunken, oily cotyledons. The pericarp has a strong aromatic, faintly-acidulous taste, and an odour like that of anise. The seeds have a sweeter flavour. The fruits are given in colic, constipation, hermia, lumbago and in fevers of all kinds. They are eaten with meat as a condiment. See *Oil of Star Anise.*

**INDIGO.**—藍靛 (*Lan-tien*).—A blue dye is obtained from several kinds of plants in China, varying with the provinces of this large tract of country. The Indigofera tinctoria (木藍) a Leguminons shrub, is grown in the south. It is not used medicinally. The Polygonum tinctorum (蓼藍) is also cultivated in the south for dyeing purposes. It is cut down three times in the year to furnish material for making indigo. The juice of its herbage is said to be alexipharmic. The Isatis tinctoria, or Woad, (甘藍), a Brassicaceous plant, sometimes called 藍菜 (*Lan-ts'ai*), is eaten as a potherb, and is considered to be very wholesome and nourishing. It is cultivated in Shantung, Shensi, Kansuh and in the Yangtsze valley. The Ruellai (藍澱) is raised in Chehkiang, according to Dr. Williams, for making native indigo. Fortune says that a bastard species of Justicia, another Acanthaceous plant is grown in Chehkiang in large quantities as material for native indigo. Mr. Bowra reports (Customs Trade Report, 1869) that at Fu-yang hien (Hang-chau fu) and Fung-hwa hien, as well as in the vicinity of Ningpo, the native indigo is largely produced from this Justicia. The account given in the *Pen Ts'au* is to the effect that the plants are thrown into pits, dug in the open field and filled with water. After the rotting of the herbage lime is added and the liquid thoroughly mixed up and beaten. The water is then drawn off, leaving the thick indigo-paste at the bottom to dry, preparatory to being packed in bamboo baskets. Dr. Williams (C. C. Guide, 5th ed., p. 124) gives a full account of this process, taken from Fortune. The froth rising upon these pits of liquid is collected, and made into an extract, called 靛花 (*Tien-hwa*), or 青黛 (*Ts'ing-tai*), in imitation of a sort of powder, formerly brought from Persia, and in great repute as a paint and a specific medicine. Indian indigo is now being imported into China by way of Canton and Ningpo, and is commanding some attention. Manila indigo, a liquid extract, is imported according to Mr. Bowra into Ningpo. Formosan indigo is reported by Mr. Bowra to be an excellent dye, but is much adulterated with earth and refuse sugar. In Pehchihli very good dye is made and sold under the name of 京靛 (*King-tien*). Liquid indigo is called 水靛 (*Shwui-tien*), dry indigo 土靛 (*T'u-tien*), and Indigo-dye 靛青 (*Tien-t'sing*), or 青黛 (*T'sing-tai*). The indigo retail-trade is a very profitable one, for blue is the conservative colour of the livery of the masses of China. The indigo-dye just mentioned is almost the only form of this material employed medically. Swellings, bruises, stings, strumous glands and tumours in general are treated with a daub of this remedy. The pages of the *Pen Ts'au* inform us that fevers, fluxes, worms, infantile disorders of all kinds were treated by means of some form or other of this perhaps rarer remedy. Li Shi-chin properly remarks that the lime used in its manufacture must make its action not a little different from that of so much indigo-juice. It is curious that the Chinese have anticipated us in the treatment of convulsive diseases by this agent, the action of which in such cases deserves some further trial. The domestic use of the bluebag in England as a remedy for the stings of bees and wasps is daily carried out in China. Indigo-extract was used in painting the eye brows in olden times, as henna was employed by the Arabians.

**INFUSIONS.**—泡汁 (*Pau-chih*)—Chinese medical men and druggists generally prefer to extract the active principles of drugs by careful and repeated boilings. Tea is the grand exception to this rule, although this drink may also be prepared by boiling. Cold infusions, or percolations, are spoken of as 漬 *Tsze*. Hot infusions are called 泡 *Pau*, and a third method, in which the drugs are drenched with cold water, is called 洗 (*Si*). The element of heat is very properly taken into account by the Chinese doctors, who when they direct a decoction (湯) to be taken, expect it to be drank off whilst warm at least. Medicines in a liquid form are given in the acute stages of diseases, when sweating is called for. In place of cold infusions, spirituous tinctures are employed in chronic diseases.

**INK.**—墨 (*Meh*).—The products of China of old came to the west by way of India, and were commonly named after the latter country. India-paper and Indian Ink were both and are still, almost entirely, purely Chinese manufactures. Dr. Williams has pointed out that the manufacture of that particular kind of isinglass now made in India, and used extensively in the arts, was taught by the Chinese to the natives of Calcutta. The ink used by English artists is the Chinese (not Indian) Ink, from Nganhwui or Canton. There are some evidences of the fact that the Chinese have had some trials of a chemical ink, somewhat similar to foreign writing-fluid. Galls have been used in some way to concoct an ink, and an acetate of iron solution has been evidently experimented with, according to the authors of the *Pen Tsʻau.* The best Chinese ink, as that made at Hwui-chau fu in Nganhwui province, is composed of the soot collected from burning pine-branches under a movable roof of thatch, and isinglass or boiling glue most carefully mixed together. Oil, and formerly Rock-oil, have been burnt to produce an extra quality of ink, to which liquid storax is sometimes added. It is always scented with musk or some other perfume. The Corean ink is said to be good. Good ink is put up in plain patterns, except the very best which is gilt all over. It should be bright when broken, be free from grittiness when rubbed on the ink-stone, emit a strong scent, and render the writing glazed when dry Chinese written documents may be soaked in water for some weeks without washing out. The ink may be used to mark linen, and will pass through the wash-tub in China several times without being removed. Ink is described in the *Pen Tsʻau* as astringent, diuretic, emmenagogue and vulnerary in its qualities. It is recommended as an application to the eye when irritated by the presence of foreign bodies. At the present time stale ink is employed as a kind of paint for daubing over tumours and swellings of all kinds. This is its only medicinal use at the present time, in anything like legitimate medicine.

**INDIGOFERA TINCTORIA.**—木藍. See *Indigo.*

**INSECT-WAX.**—蟲白蠟 (*Chʻung-peh-lah*), 白蠟 (*Peh-lah*), 樹蠟 (*Shü-lah*). —From the time of the Mongolian dynasty white wax is always to be understood in Chinese works as referring to the waxy secretion deposited upon the small branches of several Oleaceous trees, described further on under the article on Wax-tree. This insect, the Coccus Pe-la of Westwood is of a whitish hue when small, but becomes of a dark brown colour at the close of the season. The male insect is described in Hanbury's Notes as having large wings and an elongated anal point. The female insect appears to develope its body in such a way as to envelope the twigs of the tree. The *Pen Tsʻau* describes them as about the size of a woodlouse. In the beginning of June they are found upon the small tender branches of the trees, around which they deposit the snow-like wax. In the latter end of August, or thereabouts, the wax, which is an Imperial monopoly, is carefully scraped off the trees, is melted in boiling water, strained whilst hot, and poured into cold water, when it immediately congeals into a white, opaque, crystalline mass, very much resembling the best spermaceti. If the collection be delayed the raw wax, called 蠟渣 (*Lah-cha*), is inferior. In the autumn the dark chestnut-coloured insect begins to make a nidus, something like that of the mantis. It is at first no larger than a grain of millet, the whole covering the tree something like fruit. As the spring comes on these reddish, round receptacles become as large as a fowl's head. Each one of these insects lays several hundred eggs. At the beginning of May these collections of eggs are gathered, and wrapped in the leaves of a reed called 箬 (*Yoh*), the same as the rice-dumplings of the Dragonboat Festival are wrapped in. They are put upon the proper trees, and by the early, or middle part of June, they are hatched and have emerged from the leaves to enter upon their wax-making upon the young branches of the trees. The insects have their enemies in the shape of the ants, who climb up the trees and eat their fat friends, unless lime be sprinkled frequently over the trunks of all the wax trees. These trees are planted upon the banks between fields, or in clumps. In the latter case the trees are guarded by soldiers, and a heavy tax is collected, if the wax be not wanted by the government, who claim the right of pre-emption. Lu-chau fu in Nganhwui Kia-hing fu, in Cheh kiang, Hing-hwa fu in Fuhkien, Li-pʻing fu and Hing-i fu in Kweichau, Chang-teh fu, Kwang-chau ting Tsing chau, Yung-shun fu, Hang-chau fu, Kwei-yang chau, and other places in Hunan, with several districts in Yunnan and Sechʻuen are known to supply this wax in large quantities. Since the Taiping rebellion the price of this article has increased to some five or six times its previous cost, although there is some variation in the price. The trade in these large, flat round cakes, sometimes carried without any packing, is very extensive in Hankow. The insects and the trees are said to have been, originally, inhabitants of different parts of the country, until attention was directed to the culture of this wax. The wax is beautifully white and crystalline. It melts at about 152°, and is tolerably soluble in alcohol. It dissolves readily in essential oils, but is not much affected by acids, or alkalies. There is some difference in the hardness of some of the samples, but a moment's consideration would satisfy any one that a substance which never shows signs of melting in the high summer temperatnre of Central China, and is used only in very small quantities to harden the outer coat of Chinese candles, could not have a melting point of about 81°, as stated in books. Its composition is that of ceryl cerotate (C27 H53 O2, C27 H55). It yields cerotic acid and cerylene by dry distillation. It is used in making candles, when mixed with vegetable tallow, and is the basis of the black composition used in rubbing off visiting cards, or other simple impressions from small blocks. It is said in the *Pen Tsʻau* to be emmollient, astringent, styptic, vermifuge, and stimulating the growth of granulations. It is used in making ointments for sores, cuts and porrigo. A kind of bolus is brought from Canton, called 白蠟丸 (*Peh-lah-hwan*) and is much prized here as a vulnerary and pectoral dose. Pills are seldom coated with wax in Hupeh. White wax is used in internal injuries, after accidents, in much the same way as spermaceti was in European pharmacy, up to the beginning of the present century. See *Wax-tree.*

**INULA CHINENSIS.**—旋覆花 (*Siuen-fuh-hwa.*)—This beautiful golden-yellow, Composite flower is an exotic, having been introduced into China in the sixth century. It is collected in Lu-chau fu in Shansi, and in Ho-nan fu, Honan. The leaves and roots are said to be vulnerary and discutient. The flowers are held in most repute. The dried plants, including the stalks, pappose fruit, and roots are commonly sold in the shops. The stalks have a bitter, aromatic taste. Tonic, stomachic, alterative, deobstruent, and laxative properties are attributed to this drug. It seems to have some good effect in pyrosis, and is worth a trial.

**IODIDE OF POTASSIUM.**—海靛砂 (*Hai-tien-sha.*)—This inestimable drug is in large demand in the practice of Medical Mission Hospitals, where the tertiary effects of syphilis are daily exhibited. See *Iodine.*

**IODINE.**—海靛 (*Hai-tien.*)—The name here coined, "Sea-indigo," sufficiently expresses the sound to satisfy a certain class of persons, and embodies some of the most remarkable characteristics of this curious substance. Sea-weed has been long used in China as a remedy in goitre of the neck, common in some parts of Sech'uen, near the gorges of the Upper Yangtsze, according to Chinese writers.

**IODINE PAINT.**—海 靛 膏 (*Hai-tien-kau*)—Large use has been made of this preparation in the treatment of Pityriasis, Chronic Eczema, Callous Ulcers, Strumous Glands, and many other external diseases. Iodine is a most excellent stimulant and disinfectant, setting aside any discutient effect it may be supposed to have.

**IPECACUAHNA.**—嘔 草 (*Ngau-ts'au.*)—This valuable plant, for which a name is here coined, having been now successfully introduced into cultivation in India, by the care of the British Government, will be, perhaps, brought more under the attention of those interested in Chinese pharmacology. Gardenia resembles Ipecacuanha in its action. There is a species of Psychotria, named after Reeves, which belongs to the same natural order, and has very similar properties. The heroic doses recommended in Indian practice for the cure of acute dysentery, have certainly to be reduced in the treatment of the Chinese, who quickly show signs of early collapse in cases treated in such a manner. Dover's powder forms a much more appropriate remedy for such affections in such cases as have been treated amongst the natives.

**IPOMŒA.**—錦 屏 風 (*Kin-p'ing-fung*).—Dr. Morrison gives this name as the equivalent of this genus, distinguishing a red and a white species. He confounds the genera Convolvulus and Ipomœa together. See *Jalap*.

**IRIS.**—澤 蘭 (*Tseh-lan.*)—Several kinds of this plant would seem to flourish in Honan. The rhizomes are eaten, or added to the infused tea-leaf, to flavour it. The leaves are said to be very useful in puerperal complaints. Hair-oil and toilet-washes were formerly scented with the leaves and roots.

**IRIS FLORENTINA.**—白 芷 (*Peh-chi*).—The fragrant rhizomes of this plant are met with all over China. Some confusion between this plant and the Opoponax is apparent in Chinese works. The roots are brown, marked with wrinkles, transverse ridges, and tubercles, tapering, and from two to four inches long, varying from the size of the thumb to less than that of the little finger. The smell is aromatic and somewhat umbelliferous in character. The interior is mealy, white, and marked with reddish, vascular points, containing an oily excretion, which, probably, confers the stimulant and odorous properties upon this orris root. It is very liable to be eaten by insects. Diaphoretic, stimulant, sedative, demulcent, alterative, stomachic, emmenagogue, vulnerary, and desiccant properties are ascribed to the root, which is a favourite remedy and cosmetic article with Chinese ladies. It is used as a snuff in polypus narium and epistaxis. The leaves are made into a wash for children suffering from pimples or prickly heat.

**IRIS OXYPETALA.**—馬 蘭 (*Ma-lan.*)—The rhizomes of this plant are recommended in the *Pen Ts'au* as remedies in ague, colic, bloody fluxes, piles, and in cases of severe injury, attended with loss of blood.

**IRON.**—鐵 (*Tieh.*)—Iron, called by the Chinese the "black metal." is rated by them as valuable, but deleterious in its qualities. Fukkien, Canton, Kansuh, Honan, Hupeh, (Tang yang hien), Shensi, Shantung, and Sechʻuen, with other provinces, yield an excellent quality of iron, as a rule. The convenient forms in which foreign iron is brought to market tempts the Chinese to buy what they could sell with advantage to all parties. An abundance of coal and iron, nearly all over Shansi, and the fibrous quality of the iron, which is equal to Swedish metal, would alone relieve China from her present bankrupt state. Hunan and Honan provinces are equally happy in this combination of fuel and ore. Red hæmatite, limonite, black magnetic, meteoric, and specular iron ore are all met with in these provinces. The iron-trade is carried on in a very petty manner in China in all its stages. A kind of Vinum Ferri is directed, in the *Pen Tsʻau*, to be given internally as a cordial or alexipharmic remedy. Washes for prolapsus recti, eczema, and bites of wild quadrupeds are prescribed in a very vague way. Manganese is found in connection with the iron ores of Chin Chau of Hunan (Richthofen).

**IRON-FILINGS.**—鐵粉 (*Tieh-fen.*)—Steel and iron filings are levigated, and used, in combination with other drugs, in the treatment of acute convulsive diseases, the delirium of fever, and in catarrh. 鍼砂 (*Chin-sha*) is a similar rough powder, used as an astringent remedy, and in making fireworks.

**IRON-RUST.**—鐵鏽 (*Tieh-siu*).—The "embroidery,"or "red-coat," of rusting iron is used in Chinese pharmacy as a kind of paint, made with oil, and is applied to sores, swellings, scalds, burns, herpes, and ranula, and is prescribed internally as a remedy for spermatorrhœa, and as a means for quickening parturition. A kind of forge-water, made by immersing iron in water, is recommended as a drink in certain disorders of the nervous system, and as a wash or a draught in carbuncle, boils, malignant pustule, and the peculiar form of lichen which affects certain persons who even look upon the rhus-varnish of the Chinese.

**IRON, BLACK OXIDE OF.**—鐵落 (*Tieh-loh.*)—The scales of iron heated to redness have the composition of an intermediate oxide called the triferro-tetroxide of iron. Antiphlogistic, neurotic, and other properties are referred to this substance. Ferruginous preparations are all presumed to benefit cardiac and hepatic affections. These scales are used in the manufacture of fireworks. The *Pen Tsʻau* records the fact that this black oxide was formerly powdered, digested in vinegar, and the solution used to write characters, Chinese ink being traced over the back of the characters.

**IRON, MAGNETIC OXIDE OF.**—臨生.—See *Magnetic Oxide of Iron.*

**IRON, HYDROUS PEROXIDE OF.**—無名異.—See *Limonite.*

**IRON, NATIVE PEROXIDE OF**—自然銅 (*Tsze-jen-tung*).—DUHALDE writes that this "native copper" was, in his time, a red copper, washed down by torrents from the mountains in Yunnan. Bracelets made of it were used or worn by the Chinese and the Tartars of that period affected with neuralgia or incipient leprosy, in much the same way as the so-called galvanic rings were formerly puffed and sold as charms for similar rheumatic pains in England some few years ago. The missionaries quaintly remark that the Tartars accompanying them found equal relief from bracelets of Yunnan gold presented to them. This native ore is in reality a peroxide of iron, occurring in more or less perfect cubes, varying from half-an-inch to a few lines in length. It is brought from Hing-ngan fu in Shensi, and from Kwang-sin fu in Kiangsi.

It is probable that other ores have come to be called by this name of *Tsze-jen-tʻung*, which was certainly applied to cupreous, and, perhaps, to zincoid ores. The cubes are roasted, powdered, and levigated, or sprinkled with vinegar, the favourite acid solvent of the Chinese. The use of calamine, and of cupreous, and ferruginous preparations are all included under the formulæ of the *Pen Tsʻau*. HANBURY is of opinion that this peroxide is artificial.

**IRON, SESQUIOXIDE OF.**—鐵 朱 (*Tieh-chü*), 礬 紅 (*Fan-hung*).—This name for the red oxide, or old carbonate of iron, is taken from the *Pen Tsʻau*, where it is given as a synonyme of Red Hæmatite or Bloodstone. The rust of iron, which is a hydrate of the sesquioxide of iron, is treated of elsewhere, but it seems desirable to have the ordinary red oxide of iron, so very useful in the treatment of the numerous asthenic diseases of the Chinese, carefully distinguished as a genuine preparation, *Fan-hung* is prepared by calcining the common unpurified copperas, or sulphate of iron. The depth of colour increases with the temperature employed. It is used as a colouring for walls, temples, Confucian halls, and common wood-work, and in tinting porcelain. It may be used in medicine as an occasional substitute for the foreign article. It is frequently adulterated with red ochre.

**IRON ORE, BROWN CLAY.**—禹 餘 糧.—See *Brown Hæmatite.*

**IRON ORE, MAGNETIC.**—慈 石.—See *Magnetic Iron Ore.*

**IRON, NODULAR PYRITES.**—蛇 黃.—See *Brown Hæmatite* (*Yü's Crumbs*).

**IRON, ACETATE OF.**—鐵 華 粉 (*Tieh-hwa-fen*).—The *Pen Tsʻau* directs that this preparation be made by putting steel filings or cuttings into vinegar, after previously sprinkling the filings with brine. The vessel containing this mixture is to be buried in the dark for a hundred days, and the acetate of iron scraped off and made into a powder. This formula is little used at the present time. The *Pen Tsʻau* intelligently prescribes the powder as a tonic and constringent remedy. Prolapsus vaginæ is treated topically with this drug, mixed with camphor.

**IRON, CITRATE OF.**—鐵 華 片 (*Tieh-hwa-pʻien*).—The name here given for a most useful preparation in the treatment of diseases of both male and female patients in Chinese practice, is coined from the Chinese name for the Acetate of Iron, an analogous preparation.

**IRON, CITRATE OF QUININE AND**—鐵 綠 片 (*Tieh-luh-pʻien*),—A convenient name here introduced for use in Mission Hospitals.

**IRON, IMPURE SULPHATE OF.**—皂 礬 (*Tsau-fan*).The "dye salt" called by this name is a green copperas, sold at a very cheap rate, and very useful as a disinfectant, for which purpose it has been used for some years in the Wesleyan Mission Hospital, Hankow. It is used in dyeing black, and as an emetic in cases of poisionng. Its uses are not distinguished in the *Pen Tsʻau* from those of the *Luh-fan.*

**IRON, SULPHATE OF.**—綠 礬 (*Luh-fan*), 青 礬 (*Tsʻing-fan*), 膽 礬 (*Tan-fan*).—The purified sulphate of iron sold under these several names of "green vitrol," "azure vitrol," "bile vitrol," is sold in broken masses of green crystals of great purity, and little disposition to oxydyze, even in the damp atmosphere of China. It is twice the price, or more, of the common sulphate, made by mixing together sulphureous coal with hepatic iron pyrites, and allowing spontaneous chemical action to take place, the heap being plastered over with mortar to exclude the air. It is made in the coal district of Lau-fu ho in Tsing-chau fu (Shantung), Ta-tʻung, Tai-yuen fu, Sih chau, and Pʻing-ting chau in Shansi, Hang-chau fu in Hunan, and at Tung-yang fu in Nganhwui, amongst other places. The words *Tan-fan* are applied to both the sulphate of copper and the sulphate of iron. At Chang-teh fu in Honan sulphate of iron is calcined to produce the sesquioxide of iron, used as a pigment. Sulphate of iron is used in making varnishes, dye-mixtures, and hair-washes. It is set down in the *Pen Tsʻau* as a useful drug in dyspepsia, ague, uterine fluxes, constipation, liver diseases, infantile marasmus, vermes, blood-diseases, and throat affections. It is directed to be used as a stimulant, detergent, astringent, and disinfectant wash in eye-diseases, affections of the scalp and skin and foul sores. It is seldom ventured upon as an internal remedy by the faculty of the present day. The experience of Mr. MACNAMARA in India, of Dr. BUDD, and of Professor PETTENKOFER, point to the efficacy of this salt as a disinfectant for the discharges of cholera and fever patients.

**IRON, SULPHURET OF.**—金星石 (*Kin-sing-shih*), 鐵礬 (*Tieh-fan*).—This substance, of a brass-yellow or golden colour, as the first name indicates, is met with as a natural product in districts where alum abounds. It is known to contain iron, but is never used at the present time in medical practice. It is the source of the copperas, and the other forms of sulphate of iron.

**ISATIS TINCTORIA.**—甘藍.—See *Indigo.*

**ISINGLASS.**—魚鰾膠 (*Yú-piau-kiau*).—This gelatinous substance, sometimes called in short *Yu-kiau* or "Fish-glue," instead of "Fish-sound glue," as above, is made from the sounds of fish, which have been an article of food in China since the Han period. Dr. WILLIAMS says that excellent diaphanous gelatine is prepared in Calcutta from the sounds and noses of a kind of river carp, caught in the Ganges. This manufacture was taught to the natives by Chinese settlers. Some of this is, perhaps, imported, but the greater part of the so-called isinglass (洋菜) is really a preparation from sea-weed used to make jellies. Isinglass of the kind imported would be too dear for making ink. The Chinese would seem to have forgotten their own art of making this elegant article, for it is never met with. The *Pen Tsʻau* speaks of isinglass-plaster for wounds. Parched isinglass is recommended in fluxes, hœmorrhages, and certain puerperal complications. Like all emmollient remedies, isinglass is reckoned to facilitate parturition. A substance called 煙膠 (*Yen-kiau*) or Smoked Glue, is some empyreumatic product or a compound of soot and glue, which must be exceedingly like Chinese ink. It is used as a daub for lepra or psoriasis, and to quicken the expulsion of the placenta.

**IVORY.**—象牙 (*Siang-ya*).—The elephant, sometimes called 伽耶 (*Kia-ye*), was formerly found in portions of Canton province, but is now almost confined to Kwangsi (Nan-ning fu) and Yunnan. Cochin China supplies ivory, as it did the elephant itself in former times, as a tribute to the emperors of China. The trunk of the elephant was formerly a great dainty with the Chinese. Elephants' hide (象皮) is an old vulnerary remedy, taken by those suffering from severe wounds difficult to heal. Plasters are commonly sold, professed to be made from the skin of this animal. *Siang-pʻi* is a name sometimes used for india-rubber. The tusks of slain elephants are preferred to those of diseased animals for medicinal purposes. The powder or shavings of ivory is recommended as a vulnerary, diuretic, and tonic remedy. Ivory-jelly, made by boiling the shavings, which may be procured in any quantity from Canton, is an excellent remedy for rachitic children. Chopsticks, inlaid work, ornaments for girdles, foot-measures, knife-handles, and ivoryware of great variety are made by the Chinese in large quantities and exported.

## J

**JADE.**—玉 (*Yuh*).—This celebrated mineral, the *Yuh* or gem, *par excellence*, of the Chinese, the *Yeshm* of the Persians, the *Sootash* of the Turks, is supposed, by the Chinese, to possess humane, just, intelligent, brave, and pure qualities, presumed to be conveyed to the wearer. Those who take it are said to be relieved from the claims of gravitation. It is met with in Fung-t'ien fu (Shingking), Lien-chau fu (Canton), in Shantung, near Khoten, Karakash, Yarkand, and other places in Turkestan, in the rivers among the Saiansk mountains to the S.W. of Lake Baikal in Eastern Siberia, and other places in Eastern Asia. It is also met with in New Zealand, Polynesia, and in a few localities in the United States. It is of various colours, such as white, blue, yellow, and green. The milk-white is highly valued, and so is the light green variety. It consists, chemically, of the silicates of magnesia and alumina, with varying quantities of chromium, and perhaps other metals, according to the tint of the stone. Its hardness, weight, sonoriety, and peculiar sombre tint are the foundation of the Chinese taste for this precious stone. Philosophers and physicians have ascribed all sorts of properties to this substance, which can be no better than so much steatite or soapstone for any purpose in pharmacy. Chinese jade articles have been dug up in Europe in connection with very ancient remains.

**JALAP.**—燕 脂 (*Yen-chi*).—The true jalap-root is not met with in China. The flowering plant here given is the Mirabilis Jalapa, the roots of which, under the name of *Loh-kw'ei*, are known to be purgative. This plant is the Marvel of Peru of gardens. The petals are used to stain the nails, or the seeds are made into tooth powder.

**JASMINE.**—茉 莉 (*Moh-li*), 素 馨 (*Su-hing*), 耶 悉 茗 (*Ye-sih-min*).—The *Moh-li-hwa*, or Jasminum Sambac, with its white, fragrant flowers, is well known to all. It gives its name to almost the only intelligible Chinese musical air which has been reproduced for foreign ears. Its flowers are used to scent teas, and to prepare toilet articles. Oil is extracted from them and from the *Su-hing*, which is the Jasminum officinale. The roots of the Jasmine plants are said to be deleterious. A tincture made from them is said to have very powerful sedative, anæsthetic, and vulnerary properties. These jasmines were brought from Persia and Central Asia. The name *Ye-sih-min* is singularly like the English word jessamine. *Yé-sih-mih* is another foreign synonyme given in the *Pen Ts'au*. The bruised flowers of Jasminum sambac are strongly recommended by Dr. WARING (Ph. of Ind., p. 137) as a remedy for arresting milk-abscess, or as a lactifuge. Similar properties are also referred to the leaves of Chavica Betle. See *Nyctanthes Arbor tristis*.

**JATROPHA CURCAS.**—桐樹 (*T'ung-shü*).—Several trees yielding *T'ung-yú*, or Wood Oil, are called by this name, such as the Elæococca verrucosa, E. vernica, and the Paulownia imperialis, H. & S. The Jatropha tree, with its white, monœcious flowers and tricoccous fruit, is met with in the hilly districts of Hupeh. The fruit is gathered in early summer, and yields a portion of the wood-oil of the district. It is extracted by means of steaming and pressing the seeds. The oil is purgative, and enters into the composition of nasty Chinese plasters. It is used in oiling boats and wood-work.

**JOB'S TEARS**—薏苡仁 (*I'-i-jin*), 苡仁米 (*I'-jin-mi*).—The grain or fruit of the Coix lachrymalis, and C. exaltata, according to Tatarinov, is called by this quaint name. It is a gramineous plant, delighting in wet swamps, and growing, under favourable circumstances, to the height of several feet. The seeds are hard and beadlike, and are somewhat like pearl barley, for which they make a most excellent substitute. The plant does not flourish so well in China as in the Philippines, where the Chinese settlers make a kind of meal, very nourishing for the sick. Dubarry's Revalenta Arabica probably contains some of this grain, to disguise the taste of the lentil. Annam is believed to have supplied the plant to China. It is larger and coarser than pearl barley, but is equally good for making gruel. As it is sold at five pence per Chinese pound it makes an excellent diet-drink for hospital patients in China. The native doctors praise the seeds in phthisis and other lung-diseases. Pectoral, cooling, demulcent, and nutrient properties are generally attributed to the tea made from them. It is serviceable in urinary affections. A wine is made by fermenting the grain, and given in rheumatism. Sail-matting and box-coverings are made from the straw. Priests are sometimes seen using the largest corns as beads in their rosaries.

**JONESIA ASOKA.**—無憂花 (*Wu-yu-hwa*).—The flowers of this "sorrowless" tree, upon which the mother of Sakyamuni Buddha is said to have laid hold in the pangs of the birth of her son, are barely mentioned in Chinese works on natural history. It is a Leguminous tree, and the legend is to the effect that it always bursts into flower when touched by a woman. See Eitel's *Handbook of Chinese Buddhism.*

**JUGLANS REGIA.**—胡桃 (*Hu-t'au*). See *Walnut.*

**JUJUBE.**—棗 (*Tsau*).—Several species of Zizyphus are met with in Central China, but the whole subject requires investigation on the spot, where the fruits are raised. Shantung produces a red fruit, called 紅棗 (*Hung-tsau*), which resembles the red jujube of southern Europe. They come from T'sing chau and Tsí-ning fu, and other places in Shantung. These are also called 大棗 (*Ta-tsau*), and are used officinally as a vehicle for many drugs. 蜜棗 (*Mih-tsau*) are these fruits, or similar kinds, preserved by means of honey or sugar, making a very wholesome fruit. The best are very closely striated upon the surface. The leaves of this plant are given in infantile fevers and in dyspepsia. The root and bark are also officinal. 南棗 (*Nan-tsau*) are an inferior kind of fruit brought from Kia-hing fu and Kin-hwa fu in Chehkiang, and are not so sweet. 凉棗 (*Liang-tsau*), or "cooling dates," are the unripe fruit of a Zizyphus, brought to market in the summer. They are greenish-yellow in colour, and have an austere flavour. They are apt to cause purging. 貢棗 *Kung-tsau*, or "tribute dates" are brought from near Nanking, but have not been actually met with. The *Pen Ts'au* mentions the 苦棗 (*K'u-tsau*), or "bitter date," and 仲思棗 (*Chung-sze-tsau*) as names of similar Rhamnaceous shrubs, having medicinal properties. The bark of these Zizyphi is undoubtedly astringent. See *Rhamnus* (*Zizyphus*) *soporifer*.

**JUNIPER**.—側柏 (*Tseh-peh*).—The medicinal properties of this coniferous shrub are not known or specially distinguished by the Chinese faculty. Some of the artificially trained plants in Chinese gardens, having the shapes of all sorts of creatures, are junipers.

**JUSTICIA**.—黃連 (*Hwang-lien*).—The roots of several species and varieties of this beautiful Acanthaceous plant are brought to Hankow from Kwei-chau fu, and Fung-tu hien in Sech'uen, the Botanic Garden of Chinese druggists. Kweichau, Hupeh and Nganhwui, with other provinces, are said to yield Justicia-root. It is sold in short, branching pieces, one or two inches long, of a yellowish-brown colour, moniliform to some extent, and often bristled with radicles. The interior is hard, the cortical part being dark and the central portion pierced by a deeper shade of pith, of a deep rich, yellow colour. The taste is intensely bitter, but aromatic as well. The Hankow druggists speak of a large, and a small sort. The more brittle it is the better. 水連 (*Shui-lien*) is the root of an aquatic species, valued highly. 彭連 (*Pang-lien*) is another good sort brought from Panghien in Sech'uen. 馬連 (*Ma-lien*) comes from Ma-pien ting in Sech'uen. 胃連 (*Wei-lien*) is an inferior sort. 母連 (*Mu-lien*) is another kind, rather coarse. This drug, with perhaps species of Andrographis, and other allied genera, is supposed to clear inflamed eyes, to benefit the chest, to combat dysentery, fever, and to act as an alterative or alexipharmic drug. It is usually sold in very nicely-cut slices. Most midwives insist upon every infant swallowing a dose of this drug, mixed with borax, soon after birth. This is said to prevent apthæ and to eliminate, or counteract, all syphilitic poison. It closely resembles the Creyat, or Kariyat of India in its action, which is the same in general character as that of Chiretta. The leaves and stalks are not used. The *Kan* and many other infantile disorders are treated both topically and internally by this drug. A tincture may be made to be taken as a "Bitter," by digesting three ounces of the sliced root and two ounces of Canton orange-peel cut very fine, for a week in a pint of good brandy. It is an excellent remedy for dyspepsia. A species of Justicia is said by FORTUNE to be used in Chehkiang to make indigo. TATARINOV describes a species of Leontice under the name of *Hwang-lien*. HOBSON confounds this plant with the Gentian.

**JUTE**.—火麻 (*Hu-ma*).—This coarse fibre, used in caulking ships and in making string, is brought from Kiangsi and Sech'uen. The Shanghai Delegates heard of its growing in Wan-kiang hien near Ching-tu fu. It is said to be yielded by Corchorus capsularis, but species of Cannabis also yield this fibre, sometimes called 百子頭 (*Peh-tsze-t'u*).

## K.

**KADSURA CHINENSIS**.—五味子 (*Wu-wei-tsze*).—This scrambling shrub (Schizandraceæ) is the representative in China of a genus found in Corea and Japan, and remarkable for the viscid mucus which abounds in the fruit and branches. The Japanese women are said by SIEBOLD to dress their hair with it, and the Japanese *P'i-chi*, or Mulberry-bark paper is sized with its mucilage. Ts'ing-chau fu in Shantung, Tai chau and Tsi-nan fu in Shensi, and Kwang-teh chau in Nganhwui are localities affected by this plant. The *Pen Ts'au* makes a northern and a southern variety. The small, red berries are wrinkled, slightly reniform in shape and contain two reddish-yellow, crescentic seeds. The Chinese name "five-tasted" is partly justified by the sour taste of the pulp, and the subacrid, bitterish flavour of the seeds. The specimens of the drug generally contain portions of the stalks of the berries, which are collected in a head as they grow upon the trees which support the trailing plant. Tonic, aphrodisiac, pectoral and lenitive properties are ascribed to the plant, although the Chinese unwisely reject the branches, which yield a mucilaginous decoction, efficacious in dysentery, gonorrhœa and coughs. This plant is believed to contain the quintessence of the five elements as the basis of its properties.

**KÆMPFERIA.**—山奈 (*Shan-nai*), 山辣 (*Shan-lai*), 三奈 (*San-nai*).—The fragrant, warm roots of Alpinia and Kæmpferia, if not of Hedychium, are grown in the south of China, and exported under the general name of Capoor Cutchery. This latter term, met with in the tariff is a barbarous corruption of the Hindustani name *Kafur Kuchri*, applied to the root of perhaps Galanga and Hedychium. Fuh-lin kwoh is said to have yielded a like root, the flowers yielding an oil. The root is met with in the shops in flat, oblong, or round disks, from half to one inch in diameter. They are white in the central mass, which is covered with a reddish brown, shrivelled epidermis. Some of the pieces are very irregular in shape, and branched. The odour is pleasant ,and the taste warm and aromatic. The root is eaten like common ginger, but is credited with stimulant, prophylactic, stomachic, carminative and similar properties. It is principally used as remedy in toothache, or as a wash in dandriff or scabs upon the head. It appears to destroy lice and pediculi. Dr. WILLIAMS says (C. C. Guide, 5th ed.) that "it is exported from Canton and Swatow to Bombay, Persia, and Arabia, where it is used in perfumery and in medicine, and also to preserve clothes from insects." 廉薑 (*Lien-kiang*) is a somewhat similar Scitamineous root, used in the south as a remedy in pyrosis.

**KAFUR KUCHRI.**—山奈 See *Capoor Cutchery and Kæmpferia.*

**KAOLIN.**—高嶺土 (*Kau-ling-t'u*), 白堊 (*Peh-ngoh*).—This is the aluminous ingredient of Chinese porcelain, named after a hill near Kin-teh-chin, in the Kiangsi pottery-district. It consists of silicate of alumina, and is not clearly distinguished from petuntsze, the siliceous element in China-ware. It is absorbent, astriugent, corrective, and detergent according to Chinese authors.

**KINO.**—赤膠 (*Ch'ih-kiau*).—Gum Kino is said to be imported into China under the name of 檳榔膏 (*Pin-lang-kau*), or Betle-nut extract, a name properly applied to Gambier, or Pale Catechu. It is possible that some of the Gum Lac of southern China is the product of the Butea tree, which yields the Bengal Kino. See *Gum Lac.*

**KNOTGRASS.**—萎蕤 —See *Polygonum aviculare.* It is curious that this plant is directed in the old Anglo-Saxon translations of the Herbarium of Apuleius, to be applied to women's sore breasts, in much the same way as in the Chinese pharmacopœias.

**KOCHIA.**—地膚子 (*Ti-fu-tsze*).—The small, roundish, green seeds of this Chenopod resemble silkworm's eggs. They are supposed to be cooling, tonic, and antiscorbutic. The herb is eaten, as almost everything not positively destructive to life is in poor China, and is prescribed in diarrhœa, dysentery, and urinary disorders. They appear to have some good effects as a vermicide.

**KOUMISS.**—馬乳酒 (*Ma-jü-tsiu*).—Tartar drinks of various kinds made from whey and butter-milk were called 醍醐 (*Tʻi-hu*), a name applied to ghee, or the oleine of butter as well. The milk of the mare has seventeen per cent of solid matter, and eight per cent of sugar of milk, which renders it very liable to undergo alcoholic fermentation. This the Tartars were quick to observe and turn to account. Koumiss was used in China during the Han dynasty. It is quite a distinct drink from the Russian drink called *quas*, a spirit prepared from pollards. Latterly some attention has been drawn in Germany and England to the treatment of cases of bronchitis and phthisis by means of a course of this not very agreeable drink.

## L

**LABLAB VULGARIS.**—藊豆 (*Pien-tau*).—The early pods of this Leguminous plant are largely eaten, and much resemble the English kidney-bean in flavour. There is a Nanking variety. Cooling, prophylactic, antidotal, antispasmodic, stomachic, and corrective qualities are attributed to the beans.

**LAC.**—紫梗 (*Tsze-kung*), 紫草茸 (*Tsze-tsʻau-jung*). See *Gum-lac.*

**LACTINE.**—乳糖.—See *Sugar of Milk.*

**LACTUCARIUM.**—苣汁膏 (*Kü-chih-kau*).—The Chinese attribute slightly narcotic properties to some of the Cichoraceous plants. The name here given is coined. See *Lettuce.*

**LAGENARIA VULGARIS.**—壺盧 (*Hu-lu*), 葫蘆 (*Hu-lu*).—This species of Bottle Gourd has been put to all sorts of uses. Its soft, downy herbage is sometimes eaten. Its long fruit, bulging at the further end, often constricted into very odd shapes, makes calabashes, floats, dishes, beggars' platters, musical instruments, and receptacles for drugs. It is largely eaten as an article of food, but is apt to purge. Cooling, laxative, lenitive, and anti-lithic properties are referred to it in the *Pen Tsʻau.*

**LAKA.**—降眞香 (*Kiang-chin-hiang*).—The tree yielding this red wood is the Tanarius (Tenaris ?) major of Sumatra, according to Dr. WILLIAMS, who places it among the Chinese imports. The tree grows in Canton province, Kwangsi, the island of Hainan, and in Kweichau. It is said to be supplied from Shau-king fu (Canton), Hing-í fu (Kweichau), and from Liu-chau fu, Sze-ching fu and Si-lung chau in Kwangsi. That brought from Annam, Cambodia, Siam, Borneo, and other foreign countries is preferred to the native wood. It is met with in large bundles of long, rough pieces, of a reddish-grey colour on the outside, and of a deep magenta-red on the broken surface. Rotten portions of the wood are met with in its substance, with more or less of the colour discharged. The grain is very hard, the smell fragrant, but the taste is very slight. The wood is used in dyeing, and is burnt, or powdered, and mixed with gum resins to make incense. It is used in medical practice as an astringent, as a wash to cleanse sores and excite granulations, and as a deodorizing or disinfecting agent.

**LAMINARIA**.—海帶 (*Hai-tai*), 昆布 (*Kwan-pu*), 海藴 (*Hai-wan*).—Several species of Laminaria, Rhodomenia, Iridæa, &c., are included under these general names for Algal plants. Laminaria saccharina and L. digitata furnish size, jelly, and many excellent dishes of food for the Chinese. The whole coast from Shantung to the south of China, not omitting Corea and Japan, furnishes large tribute of this article. Under the name of *Gillur ka putta*, a dried seaweed, assumed to be collected near the mouth of the Sagalien River, is highly prized in Upper India as a remedy for bronchocele. The Chinese authors direct these seaweeds to be given in goitre as a tincture or a dried powder. The *Kwan-pu*, or "tangle," is prescribed in dropsies of all kinds, and the *Hai-tai* is also prescribed as a remedy in menstrual disorders, with some credit of the power to increase the action of the uterus in difficult labours. The Chinese regard a diet of seaweed as cooling, but rather debilitating if pursued for a long time. Clarified seaweed is imported from Japan and sold under the name of 洋菜 (*Yang-ts'ai*). It is said by Mr. BOWRA to be classed as isinglass in the tables of imports.

**LAPIS ÆTITES**.—禹餘糧.—See *Brown Hæmatite.*

**LAPIS ARMENUS**.—扁青 (*P'ien-ts'ing*).—The English translation of DUHALDE describes an azure mineral, which is probably a smaltine, or arseniuret of cobalt, under this name of Armenian Stone, more correctly applied to Armenian Bole. It is confounded with malachite. It is brought from Hainan island in flattish pieces, and is in some demand. Roasted, powdered, and perhaps vitrified, it becomes the 瑠 (*Liu*) of DUHALDE, the "powder-blue" of commerce. See *Malachite* and *Lapis Lazuli.*

**LAPIS HEPATICUS**.—伏龍肝 (*Fuh-lung-kan*).—TATARINOV describes this Chinese drug as a Bole Clay. A reddish clay is certainly brought from Canton, and from Yen-ching hien in Kiangsu, and used as an astringent, styptic, and absorbent nostrum. The substance more properly described by the Chinese name is the calcined clay which forms the simple fire-place of the poor Chinese. It is mixed with pig's liver and administered as a remedy in cross-births, puerperal, cutaneous, and many other disorders. The word *Fuh-lung* "sultry dragon," is a name of the God of the Kitchen, the great household deity of all China.

**LAPIS LAZULI**.—瑠璃 (*Liu-li*).—The blue mineral known by this name is met with in very fine specimens in China and Central Asia. It furnishes the pigment called ultramarine, and is probably one of the sources of DUHALDE's azure Lapis Armenus, used in colouring porcelain. The Buddhists set great store upon this stone, reckoning it as one of the seven precious things. Southern India yielded a similar mineral, called in the *Pen Ts'au* 火齊 (*Ho-tsi*). The water in which this mineral of most variable composition is dipped, or the substance itself, is believed by Chinese philosophers to cure fevers and inflamed eyes.

**LARD**.—猪油 (*Chü-yu*).—This name indicates the melted fat of the domestic pig, also called 花油 (*Hwa-yu*). The solid, raw, adipose tissue is called 脂膏 (*Chi-kau*). 猪板油 (*Chü-pan-yu*) is lard prepared from bacon, or any other fat of the pig, beside the caul

Lard is reckoned to be demulcent, laxative, diuretic, pectoral, and healing in its properties. Few ointments are made of lard at the present time by the Chinese faculty. Lard required for use in Mission Hospitals in China should be mixed with benzoin, and in summer should have a small quantity of white insect-wax melted up with it, to render it solid during the hot weather.

**LARD-STONE.**—塊 活 石 (*Kw'ai-hwoh-shih*).—A friable greyish-white mineral, containing magnesia, which gives it an unctuous feel. It resembles talc to some extent. Both the alumino-siliceous minerals and the magnesian talcs are called by the same names in China. See *Steatite.* Some of these minerals would appear to have entered into the composition of some of the old Chinese pottery of the best kind.

**LARVÆ OF FLIES.**—五 穀 蟲 (*Wu-kuh-ch'ung*).—The dried larvæ or worms of the blue-bottle and house fly, with other species of this class of vermin frequenting privies, are carefully collected and dried as an article of the drug-warehouse. They are imagined by the Chinese, who positively waste nothing about them, to contain something of the nature of the "five cereals" upon which men feed, and these insects subsequently deposit their brood. The dried, stinking grubs are given to children suffering from marasmus, tabes, and pot-belly.

**LAUDANUM.**—鴉 片 酒 (*Ya-p'ien-tsiu*).—Dr. HOBSON first used this term for the tincture of opium. On some grounds it is desirable to use a word for this most useful preparation, not indicating its composition.

**LAVENDER-WATER.**—花 露 水 (*Hwa-lu-shwui*).—The name here given "flower-dew water," is the one adopted by the druggists, who sport it on their gay signboards. They confess to have no such class of preparations as essences or distilled waters. The dew gathered at early morning from certain Pinaceous or Alliaceous plants, and especially that from off the Sweet-flag is reputed to be pectoral, sedative, and cosmetic. The dew collected on the morning of the first day of the eighth month is mixed up with Chinese ink, and daubed over the eyelids or temples, and said to be good for headaches.

**LAWSONIA ALBA.**—指 甲 花 (*Chí-kiah-hwa*).—The leaves of this Lythraceous plant, which grows all over South China, is used as a henna-dye for the nails of women and children. Its yellowish-white, fragrant flowers are used, with the leaves, in India to prepare an extract which is a remedy for leprosy. The leaves contain gallic acid, and are astringent. They are used by the natives of India to make a poultice for application to bruises and to "burning feet." This plant has been introduced from a very early period from India, or some Asiatic country under Mohammedan rule. See *Balsam* and *Henna.*

**LEAD.**—黑 鉛 (*Heh-yuen*), 黑 錫 (*Heh-sih*).—Lead is the best known of the soft metals in China. It is made into bullets, lining for tea-chests, and various kinds of solder, or alloys, for making vessels. It is associated with silver, as at Jü chau in Honan. It occurs as the sulphuret of lead, or galena, in Chehkiang, Fuhkien, and Sech'uen. Lead is regarded by the Chinese as of the masculine nature, as the character denotes when properly written. It is the progenitor of the five original metals. Persian and Japanese lead are alluded to in the *Pen Ts'au.* Chinese lead is in very small pigs, of a dark grey colour. Foreign lead is largely imported. The poisonous nature of lead is alluded to in Chinese works as producing paralysis, jaundice, constipation, and dark stools. Sedative, antiphlogistic, alexipharmic, vulnerary, and anthelmintic effects are vaguely enumerated amongst the properties of this "black metal." It is prescribed in the *Pen Tsʻau* as a remedy for toothache, struma, carbuncle, dyspepsia, dysuria, and several other diseases. It is little used at the present time.

**LEAD, RED OXIDE OF.**—鉛丹 (*Yuen-tan*).— See *Minium.*

**LEAD, YELLOW OXIDE OF.**—黃丹 (*Hwang-tan*). See *Massicot.*

**LEAD, ACETATE OF.**—鉛霜 (*Yuen-shwang*).—This is a substance made by mixing up an amalgam of fourteen parts of lead and one part of mercury, and exposing sheets of it to the fumes of vinegar in covered jars for some time. Lead by itself is also used to make what can only be a carbonate of lead, or the next preparation of lead. The name is worth retaining as distinguishing the true acetate of lead. The Tauists thought very highly of this drug, and used it as a styptic and charm. Antifebrile, astringent, styptic, emmenagogue, constringent, and other properties are sensibly referred to this drug. Lead was largely used in olden times as a means of deepening the colour of the hair, black enough already. See *Goulard Extract.*

**LEAD, CARBONATE OF.**—粉錫 (*Fen-sih*). See *White Lead.*

**LEAVEN.**—麴 (*Kiuh*).—Distiller's leaven is largely used by the Chinese in their domestic operations. This is called 酒酵 (*Tsiu-kiau*), and is the residuum left after the distilling of spirits of wine. 酒母 (*Tsiu-mu*) is a name for barley-leaven, made by hanging up cakes of kneaded barley-meal, sometimes mixed with bean-meal, until they ferment and become mouldy. Barm is not known in China, as the hop is not used. A kind of preparation equivalent to malt is described in the *Pen Tsʻau* under the name of 神麴 (*Shin-kiuh*) or "sacred leaven." It is made at Ts'iuen-chau fu in Fuhkien, among other places. It consists of flour, or coarsely ground grain, mixed up with the juice of Artemisia and other plants, on some idolatrous festal day, and hung up to become mouldy. That brought from Fuhkien is in yellow cakes, two inches-and-a-half long by and one inch-and-three-quarters wide. They are packed up very neatly, two in a box. They are used as a peptic, stomachic, and corrective remedy in the *Kan* disease of children, in dyspepsia, colic, dysentery, and diseases following drunkenness. It is said to have the power of repressing the milk of puerperal women. Its action is much the same as that of malt.

**LEECH.**—水蛭. See *Horseleech.*

**LEMNA GIBBA.**—水萍 (*Shwui-pʻing*).—Tatarinov gives the identification of this common Duckweed. Cooling, diuretic, antiscorbutic, astringent, and alterative properties are ascribed to this simple plant. It is used to wash bad eyes, carbuncles, syphilitic sores, and many other affections of the skin. The dried plant is burnt to destroy mosquitoes.

**LEMON.**— 檸檬 (*Ning-mung*).—No mention is known to be made of the lemon in the *Pen Tsʻau.* The characters here given are from English dictionaries. The first, *Ning*, is the name of a tree said to yield a bark of which a tincture is made, and given in leprosy. The second character denotes a tree with a yellow leaf, resembling the Sophora japonica. There is a tree mentioned in the *Pen Tsʻau* as the 密蒙花 (*Mih-mung-hwa*), which reads a little like the description of the Citrus Lumia of Risso, or the Sweet Lemon.

**LEMON-JUICE.**—檸 檬 汁 (*Ning-mung-chih*).—A name introduced by foreigners and applied to lime-juice as well.

**LEMONADE.**—檸 檬 水 (*Ning-mung-shwui*).—See *Aerated Water and Lemon-juice.*

**LENTIL.**—稨 豆 (*Pʻien-tau*).—The term "flat bean" is apparently applied to this Leguminous plant, the Ervum Lens of botanists, as well as to the Lablab vulgaris.

**LEONTICE.**—黃 連 (*Hwang-lien*).—TATARINOV identifies the plant described in this work as a Justicia, with this Berberidaceous plant, a species of which (L. Leontopetalum) is regarded by the Turks as an antidote for opium. See *Justicia.*

**LEONTODON TARAXACUM.**—蒲 公 英—See *Dandelion.*

**LEONURUS SINENSIS.**—茺 蔚 (*Chʻung-wei*), 益 母 草 (*Yih-mú-tsʻau*).—Samples of Artemisia are sometimes sold under the first name, which is at least the synonyme of a plant met with all over China. It is a very common weed near Hankow. It is collected by the poor people and dried, when it is usually met with in bundles of the square, woody stems, pinnatifid leaves and composite fruit characteristic of the plant. The smell is faint, but the taste is decidedly bitter. The drug is prescribed as a tonic, alterative, vulnerary and general remedy in puerperal and menstrual diseases. This latter property is indicated by the name *Yih-muh* "benefitting mothers." The seeds and others parts of the plant are officinal, and like most Chinese drugs are used both externally and internally in chronic skin-diseases, which abound in this country of the unwashed. There is an extract, largely prepared from this plant which see. Two varieties, with purple and white flowers, are met with, both used to prepare the extract.

**LEOPARD.**—豹 (*Pʻau*), 程 (*Chʻing*),ʻ 失 刺 孫 (*Shi-tsʻze-sun*).—The first name is the ordinary term for the leopard, and perhaps the panther, amimals met with in Manchuria, and used in Chinese heraldry. The word *Chʻing* is the *Tsʻin* name, and the name *Shi-tsʻze-sun* the Tungusic equivalent for this *Pau.* The creature is described as marked with black, cash-shaped spots, the hair being reddish-yellow. The 金 錢 豹 (*Kin-tsʻien-pʻau*) or Guinea Leopard is described as a small white-faced animal, with a round head, and met with in Liautung. The 艾 葉 豹 (*Ngai-yeh-pʻau*), or Artemisia-leaf Leopard is also spoken of in the *Pen Tsʻau.* It has been described by Mr. SWINHOE as inhabiting Formosa. There is also a 金 線 豹 (*Kin-sien-pʻau*), spoken of as met with in Central Asia. The bones and claws of these animals, called 豹 骨 (*Pʻau-kuh*), are used in medicine as a tonic or prophylactic remedy. They are sometimes burnt, and the ashes taken as a remedy in urinary disorders. The bones sold are seldom genuine. Sechʻuen furnishes something sold under the name.

**LESPEDEZA.**—山 豆 根 (*Shan-tau-ken*).—The large, woody root of this twining, evergreen Leguminous shrub is sold in Chinese shops in pieces varying from the size of the little finger to that of mere rootlets, the whole being connected by a knotted root-stock. Mice are said to be very fond of this very bitter root. Alexipharmic, sedative, tussic, anthelmintic, discutient and vulnerary properties are referred to it. This identification is from TATARINOV.

**LETTUCE.**—白 苣 (*Peh-kü*), 生 菜 (*Sang-tsʻai*).—Lactuca virosa is met with in

Chinese green-grocer's stalls, and various sorts have been introduced by foreign residents near the treaty ports. Species of Thrincia appear to be included in the description of this salad in the *Pen Ts'au.* Cooling, diuretic, and laxative properties are referred to this "raw vegetable." Narcotic properties are referred to a Cichoraceous pot-herb, called 蒿苣 (*Hau-kü*), of which nothing is definitely known.

**LEVISTICUM.**—當歸 (*Tang-kwei*).—This Umbelliferous plant, with *Ch'uen-kung, Ta-ch'uen-kung, and Fuh-kung* (茯芎) are referred by TATARINOV to this genus, instead of to Aralia (Dimorphanthus) edulis, or to Angelica. These drugs have some of the effects of the Sumbul root, and of the Valerian plants. See *Angelica* and *Aralia edulis.*

**LIBANOTIS.**—防風 (*Fang-fung*).—The Umbelliferous plant is grown in Tai-ngan-fu (Shantung), in Shensi, Pehchihli, and in Su-chau fu in Kiangsu. It is compared to the fennel plant, and is eaten as a pot-herb. The best root is sold in long, brownish-yellow, irregular, branching pieces, having some of the branching stem attaching to the rootstock. It has a sweetish, aromatic taste. The root is given as a derivative, or eliminative remedy in catarrh rheumatism, leprosy, and any diseases in which chills or damp have been encountered. The leaves, flowers and seeds are officinal. A decoction of the root is given in profuse sweatings, menorhagia, and in cases of poisoning by the roots of aconite.

**LIGN-ALOES.**—沉香 (*Ch'in-hiang*), 蜜香 (*Mih-hiang*).—The Aquilaria Agallocha of ROXBURGH, or the Ophiospermum of LOUREIRO is a large, evergreen tree, something like the Cedrela tree, flourishing in Kiung-chau fu (Hainan I.) and in Shauking fu and Lien-chau fu in Canton province. Cochin China, Cambodia, the Laos country, Silhet, Assam, India and Persia possess this tropical tree. The wood of the sound tree is light, pale and very slightly odorous, being used to scent clothes. When boiled it produces several substances called 馬蹄香 (*Ma-t'i-hiang*), 鷄骨香 *Ki-kuh-hiang*), 青桂香 *Ts'ing-kwei-hiang*, and 棧香 (*Chan-hiang*). These are sometimes prepared from the root, which is called 黃熟香 (*Hwang-shuh-hiang*). After the tree has been felled for some months or years a dark, resinous, aromatic juice is met with in the wood, mainly deposited in certain portions of the vascular tissue, more especially of the heart of the tree. This valuable heavy wood is called *aggur*, a name also applied to the drug in Bengali. Two sections are devoted in the *Pen Ts'au* to this subject, the *Mih-hiang*, called in Persian *Ayalur chee*, or 阿鎈 (*A-tsie*) in the Chinese, being a distinct species of Aquilaria, or some allied genus. 阿迦嚧香 (*A-kia-lu-hiang*), is the Chinese equivalent of the Sanscrit *Auguru.* This wood, or the resinous juice of the decayed timber, is the Ahalim, or Ahaloth of the Hebrews, translated Aloes by some mistake in the authorised version. The trees are sometimes buried to increase, or facilitate the removal of, the prized oleoresin. The *uttur* of HANBURY is the 婆木香 (*P'o-muh hiang*), of Chinese authors. The course, reddish-brown wood sold under the name of 沉香木 (*Ch'in-hiang-muh*), and used in the making of incense, has an odour of sandal-wood, and but a very faint bitter taste. It may be used to colour the Tincture of Lavender, instead of Red Sanders's Wood. It is very hard, and being capable of a very high polish is carved into ornamental articles, as well as burnt in the form of incense sticks. Paper is said to have been formerly made of the bark of the Aquilaria. At the present time tonic, stimulant, carminative, aphrodisiac, and diuretic properties are currently ascribed to a drug which has been in undeserved repute all over the civilized world for long ages. The drug is placed by Dr. WILLIAMS amongst the Chinese imports. For much interesting information on this celebrated substance, see HANBURY'S "Notes," page 34, and ROYLE'S Illustrations, vol. I., p. 171.

**LIGUSTRUM LUCIDUM.**—冬 青 (*Tung-ts'ing*). See *Wax tree*.

**LILIUM BULBIFERUM.**—山 丹 (*Shan-tan*).—The bulbs of this yellow-flowered Lily are eaten, and the unopened flower-buds are plucked and dried in the same way as those of the Hemerocallis, and sold as *Kin-chin-ts'ai*, or the Lily Flowers of the Export Tariff. The flowers are believed to purify the blood. The root, or bulb, is prescribed in uterine fluxes, choreic affections and eruptions or abscesses. TATARINOV gives Lilium concolor the name of *Shan-tan*.

**LILIUM CANDIDUM.**—百 合 (*Peh-hoh*).—More than one kind of Lily is included under this name, which indicates its agreement with all sorts of complaints. King-chau fu in Hupeh yields the bulbs, which are compared by the Chinese to fir-cones. They are raised by manuring with fowl's droppings, a favourite means of forcing plants, formerly much used by Chinese florists. The wild plant is preferred by some. The bulbs of this plant and those of the Lilium tigrinum (卷 丹) are, at the present time used as remedies in affections of the lungs, and are cooked with fowl-broth as a tonic remedy. The axillary buds of Lilies are also officinal, and the flowers are digested in rape-oil and the oil applied to vesicular eruptions. This preparation resembles the Oil of Lilies, once in much repute in Western countries.

**LILY-FLOWERS.**—金 針 菜 (*Kin-chin-ts'ai*), 黄 花 菜 (*Hwang-hwa-ts'ai*).—The flowers of Hemerocallis graminea and of Lilium bulbiferum are collected, dried, and exported as a medicine and a relish with meat dishes. They are largely consumed in China itself, and where ever Chinamen go. They are specially raised in Chin-chau fu, Hu chau, Kwei-teh fu, and Jü-ning fu, in Honan, and in Tsí-nan fu, Tai-ngan fu, Wu-ting fu, Tsí-ning chau and Tsau-chau fu, in Shantung province. As sold in Hankow the article consists of inferior, tubular, perianths of the unopened flower, enclosing six introrse stamens, with the three-celled superior ovary, and simple stigma, characteristic of Lilial plants. These are twisted or wrinkled, so as to give a length of four or five inches, the colour being of a dark-brownish yellow, translucent, and covered with a whitish mould or bloom. The odour is agreeable and the taste sweet and mucilaginous. Their medicinal effects are understood to be the same as those of the Lilium candidum although they are scarcely looked upon as a drug in Hankow. A reddish variety of this vegetable, prepared from the Orange Lily, is mentioned in the *Pen Ts'au*.

**LIME.**—石 灰 (*Shih-hwui*).—Limestone is very generally distributed all over China, overlying the primitive granite, and forming much of the mountain ranges, such as the Tai-hang shan of Honan, or the Meiling range between Kwangtung and Hunan, and the rocks which form the gorges between the provinces of Sech'uen and Hupeh, or the fine bluffs between Hupeh and Kiangsi. Large kilns, built up of layers of brushwood or rough fuel and broken limestone, are burnt out to produce the ordinary lime, which is weak and full of unchanged limestone. Shell-lime is sometimes obtainable, and is much stronger in quality. Lime is said to be astringent, detergent, depilatory, caustic, and absorbent. It is not used medicinally at the present time. Mortar, and putty (油灰) are both officinal in the *Pen Ts'au*. Tatarinov described 灰石 (*Hwui-shih*) as a carbonate of lime and magnesia, a dolomite in fact.

**LIME, CARBONATE OF.**—光粉 (*Kwang-fen*).—See *Calcareous Spar* and *Marble, Levigated.*

**LIME, SULPHATE OF.**—玄精石. See *Gypsum*, *Plaster of Paris*, and *Selenite.*

**LIME-WATER.**—套水 (*T'u-shui*).—This is really white-wash, used for ornamental rather than for disinfectant purposes. If allowed to settle it produces lime-water for making Black Wash and Carron Oil. A substance used to thicken white-wash, called 水粉 (*Shui-fen*), is levigated marble, or chalk, and is sometimes said to be white lead. It is, in fact, used to adulterate white lead.

**LIME-JUICE.**—檸檬汁 (*Ning-mung-chih*). See *Lemon-juice* and *Lime-tree.* This liquid is scarcely known to the Chinese as a specially prepared article. Scurvy is not a common or perhaps a possible disease in a country like China, where large quantities of succulent vegetables are consumed by all classes of the population.

**LIME-TREE.**—黎檬子 (*Li-mung-tsze*).—The *Kwang-kiun-fang-pu* refers to a small species of Citrus under this name, as having very acid fruit, but no medicinal properties are referred to it. The name *Ning-mung*, applied to the Lemon, is probably an Anglo-Chinese combination. Mr. Eitel gives 擔步羅 (*Tan-pu-lo*), or 苫婆羅 (*Chan-p'o-lo*), as the Chino-Buddhist name of the Citrus acida, the tree which yields limes.

**LIMNANTHEMUM NYMPHOIDES.**—莕菜 (*Hang-ts'ai*).—This Gentianaceous water-plant, with its yellow flowers and round leaves, was formerly eaten in spite of its bitterness. Its herbage, or the expressed juice, is given as a refrigerant, diuretic, and vulnerary remedy. Carbuncles, abscesses, swellings of all kinds, and opaque corneæ are all said to disappear after the application of the bruised plant to the affected part.

**LIMONITE.**—無名異 (*Wu-ming-i*).—This ferruginous substance differs from prismatic Limonite, as it consists of rounded, shot-like grains of various sizes, of a dull, rusty brown, or blackish, colour, with occasionally still larger pellets. When ground the colour is ferruginous. They are sometimes massed together by a matrix. Hanbury speaks of them as a Hydrous Peroxide of Iron, containing silica, alumina, and manganese. Baron Ricthofen describes the mineral as strongly manganiferous at Chin chau in Honan. It is met with in Tseh-chau fu, Shansi, and I-kiun hien in Shensi, as well as in the Canton prefecture. Arabia, or the Tajiks' country, is said to have formerly yielded this substance. It was anciently used as a vulnerary, discutient, arthritic, sedative, and escharotic drug. It entered into the composition of eye-washes and skin-lotions. Struma and fevers were at one time treated with this mineral, now discarded from the practical pharmacy of the present day.

**LINSEED.**—胡麻子 (*Hu-ma-tsze*).—The seeds of sesamum and cannabis are confounded with the small, smooth, brown, shining, comma-shaped, flattish seeds of the Linum usitatissimum. They are oily and mucilaginous. They are esteemed to be cooling, demulcent, nutrient, deobstruent, arthritic, anthelmintic, and dexipharmic. The meal (胡麻末) is used as a poultice, and to fatten fish, or to enrich the soil. This plant is of foreign origin. The Chinese meal is too coarse for hospital use.

**LINT.**—洋 絨 (*Yang-jung*).—The term here given is coined, the Chinese having nothing like it, so far as known.

**LIQUIDAMBAR FORMOSANA.**—楓 樹 (*Fung-shü*).—See *Rose-maloes*, *Storax*, and *Pig Tubers*.

**LIQUORICE-ROOT.**—甘 草 (K*an-ts'au*).—Two species, the Glycyrrhiza echinata and the G. glabra, supply the important Chinese drug, a sweetmeat in Europe, the dried root of these Leguminous plants. Tai-yuen fu and Fen-chau fu in Shansi, and Kan-chau fu, Ngan-si chau and Chinsi ting in Kansuh, with places in Sech'uen and Shensi supply the drug market. The root is commonly sold in long pieces, dry, wrinkled, and red in the surface, and yellow, fibrous, and tough in the interior. The taste is disagreeably sweet and slightly mucilaginous. It stands next to Ginseng in importance in Chinese pharmacy, being the grand corrective adjunct and harmonizing ingredient of a host of recipes. Like most celebrated Chinese drugs it is charged with the property of rejuvenizing those who consume it for long periods. It is used to allay thirst, feverishness, pain, tough, and distress of breathing. Tonic, alexipharmic, alterative, and expectorant properties are ascribed to what is at best but a vehicle or disguise for drugs of real efficiency. Liquorice is not made into an extract in China. It is used with honey as a topical application to children's burns and whitlows.

**LIQUORICE, INDIAN.**—相 思 (*Siang-sze*).—This root of the Abrus precatorius is officinal in the Pharmacopœia of India. An extract is also prepared from it, and much approved of. See *Abrus Precatorius*.

**LITHARGE.**—密 陀 僧 (*Mih-to-sung*).—The name used by the Chinese for this impure monoxide of lead is an imitation of a Persian word, the drug having been formerly procured from that grand emporium for Chinese medicines in former times. It is now made in China in connection with the smelting of argentiferous galena, and other similar ores It is sold in irregular, heavy pieces, from one to one-and-a-half inches thick, having evidently undergone fusion. It has a metallic lustre, and a variety of stratified colours of grey, green, pink and yellow, Antiphlogistic, sedative, antiperiodic, anthelmintic, tonic, astringent, detergent, and many other qualities are referred to this plumbic preparation. It is directed to be applied to mammary sinuses polypus narium, pigmentary deposits, and to many affections of the skin. It is an ingredient of stimulant and retentive plasters.

**LITHOMARGE.**—五 色 石 脂 (*Wu-sih-shih-chi*).—This "five-tinted marrow-stone," is a fine siliceous earth or clay, a sort of fulling earth, brought from the northern provinces, and containing silicate of alumina, with some portion of magnesia, giving the mineral its unctuous, highly absorbent, and other characteristic qualities Some of these earths resemble the Boles of the ancient pharmacologists. Others are streaked, mottled, and variegated like the old *Terra Miraculosa Saxoniae*. Some samples, called 赤 石 脂 (*Ch'ih-shih-chi*,) or red variety of these aluminous substances, met with as a pinkish, fusible powder, mixed with harder lumps. The blue variety (青 石 脂) answering to the Saxony Earth, is credited with good effects in hepatic diseases and fluxes. The dark variety seems to have been formerly used to paint the eyebrows. The white mineral was a remedy for children's disorders. The red earth, containing iron was appropriately used in treating female disorders, cardiac and blood-diseases, dysentery, prolapsus recti, and other diseases of debility. Some ecbolic power is attributed to this ferruginous mineral, as has been seen to be the case with the Lapis Ætites, or Brown Clay Iron Ore. Hanbury gives an analysis of the *Ch‘ih-shih-chi* in his "Notes," (page 6), showing the composition to be nearly that of Kaolin. See *Aluminous Earth.*

**LITMUS.**—石蕊 (*Shih-jui*).—A species of Lecanora is mentioned in the *Pen Ts‘au* under the name of "stone-blossom." Cudbear (紫粉) is imported from Europe, but little used. Sialagogue, cooling, and demulcent effects seem to be attributed to these Lichenous plants, which are well represented in the Chinese Flora. The "Goa Powder," consisting of the powdered thallus of Rocella tinctoria, has been long used in India as a remedy for ringworm, a common disease in China. Parmelia, a common Lichen in China, included under this name of *Shih-jui*, has been used in India as a diuretic. A poultice of the bruised plant is applied to the loins in cases of dropsy. Litmus is prepared from an infusion of these Lichens, by means of soda or potash, when a blue pigment is obtained.

**LITMUS-PAPER.**—苔紙 (*Tai-chi*).—This is a term, taken from the *Pen Ts‘au*, given to a paper coloured green by means of a species of lichen. The juice of the petals of Hibiscus Rosa-sinensis makes a very good litmus-paper, used in India.

**LIXIVIUM.**—鹼水 (*Kien-shwui*).—Woodashes and the ashes of inland plants are dissolved in water and used as a detergent wash for the hair, or, in the place of soap and soda, to clean clothes or dirty wood-work. The deposit from this lye forms a sort of potash, and, as it contains a carbonate of potash, is found useful as a means of raising bread.

**LOAF-SUGAR.**—餅糖 (*Ping-t‘ang*).—The name usually given to loaf-sugar is 氷糖 (*P‘ing-t‘ang*) or "frozen-sugar," a term properly applied to crystallized sugar-candy, a substance made at Chang-chau fu in Fuhkien, and at Tai-wan fu (Formosa). It is exported to India, and was largely used by foreigners on their first settling at the ports of China. 氷花 (*P‘ing-hwa*) is a kind of crushed sugar-candy, exported under this name of "crystal flowers." It makes an excellent stimulant, escharotic, and disinfectant for unhealthy sores, and may be applied to chronically inflamed eyes, or opacities of the cornea with considerable advantage, as directed in Chinese works.

**LOBELIA.**—淡巴菰 (*Tan-pa-ku*).—A species of Lobelia, called *Tombeki*, would seem to have formerly yielded a kind of tobacco, and probably gave its name to this latter substance, known by this same name during the rule of the Ming dynasty.

**LOESS.**—黃土 (*Hwang-t‘u*)—This alluvial, argillaceous deposit is a kind of loam, which forms, according to Ricthofen, the greater part of the Central Plain of China, and is the cause of the yellowish colour of the waters of the Hwang Ho. It contains a portion of carbonate of lime, and perhaps some siliceous matter. Its properties are much the same as those of the Yellow Ochre, which see.

**LOGWOOD.**—赤蘇木 (*Ch‘ih-su-muh*).—China is not rich in dye-stuffs obtained from timber-trees. Many substances are, however, imported into Central and North China, which might be supplied from the southern provinces. The dye-wood here called "Red sappan-wood," a coined term, is not met with in Hankow, nor is it imported elsewhere so far as known. Extract of logwood is an excellent tonic and astringent remedy for some of the terribly chronic forms of dysentery, not dependent upon malaria.

**LONG PEPPER.**—蓽茇 (*Pih-poh*), 蓽撥 (*Pih-poh*).—The character *Pih* represents the Piper of botanical writers, aad the whole name *Pih-poh* is an equivalent of the Hindustani Peepla, still better represented by the name 蓽撥梨 (*Pih-poh-li*), given in the *Pen Ts‘au* as the name in the language of the country of *Mo-kia-to*, or Magadha, which became the *Pali* of the Buddhists. Persia, Bengal, Sumatra, Cambodia, and Fuh-lin kwoh (where the drug is called 阿梨訶陀 *A-li-ho-to*) are said to have yielded this pepper, which is described as similar to the Chavica Betle, or Betle Pepper. The plant is said to grow in the south, and the fruit of the Libanotis to be sometimes used to sophisticate the peppers. It is the Chavica Roxburghii of botanists, called Piper Longum by old writers, and is common in India. The Java Long Pepper, common in the Indian Archipelago differs somewhat from the Indian samples, being shorter, and the point rather narrower. The Indian kind is imported to China. The spiked fruits sold under this name in Hankow are more than an inch long on an average, are cylindrical, generally pedicellated, and slightly tapering at the point. They are darkish-grey in colour, and studded with eminences arranged spirally. The taste is hot, pungent, and slightly aromatic. Stimulant, stomachic, carminative, corrective, and astringent properties are attributed to the peppers, which are given, with various combinations, in coryza, pyrosis, dysentery, enlargement of the spleen, menstrual disorders, and toothache. It is used in India in the treatment of Beri-beri.

**LONG PEPPER ROOT.**—蓽勃沒 (*Pih-poh-muh*).—This name is probably an imitation of the Hindustani name for the root *Peepla-mool*. It is weaker than the fruit, but is reputed to have the same stimulant, tonic, and peptic properties. It is also said in the *Pen Ts‘au* to be a remedy for barren women, whose wombs are supposed to be cold. In Travancore Dr. Waring reports its use in expediting the expulsion of the placenta.

**LONICERA XYLOSTEUM.**—忍冬 (*Jin-tung*), 金銀花 (*Kin-yin-hwa*).—The flowers, stalks, and leaves of this shrub are much valued by the Chinese as a discutient, or "draining" application to carbuncles, abscesses, swellings, and sores, both simple and specific. They are taken internally as a drink, or tincture, in rheumatism, dropsy, syphilis, cynanche, and apthæ of the mouth. The dried flowers in Chinese shops have a very similar smell to some kinds of tobacco. See *Caprifolium and Honeysuckle*.

**LOPHANTHUS.**—夏枯草 (*Hia-k‘ú-ts‘au*), 蘇子 (*Su-tsze*).—Under these and other names Tatarinov places species of this Labiate plant, which are brought from Ningpo and other places to Hankow. The leaves and stalks are used in the treatment of struma, uterine fluxes, blood diseases and affections of the eye.

**LOPHANTHUS RUGOSUS.**—藿香 (*Hoh-hiang*), 藿根 (*Hoh-ken*).—This identification of Tatarinov has not been confirmed. Mint-plants have have been found bearing these names. The rough leaves of a Lophanthus are said to be used by the Chinese to scour metallic vessels. The leaves are given in the form of a tea in disorders of the stomach and bowels in warm weather. The root is said by TATARINOV to be used in the north of China.

**LOQUAT.**—盧橘 (*Lu-kuh*).—Two or three fruits are apparently called by this name, given most properly to the Eriobotrya Japonica, from the fancied resemblance of its leaves to the ears of the ass, whose name has the same sound (*Lu*). The Citrus olivaformis, or C. madurensis as it is called by some, is one of these fruits bearing this joint name, derived from the Cantonese pronounciation of *Lu-kuh.*

**LORANTHACEÆ.**—See *Dendrobium*, *Viscum*, and *Willow Epiphyte.*

**LOTUS.**—蓮藕 (*Lien-ngau*).—The beautiful water-lily (Nelumbium speciosum) miscalled by this name of Lotus, which is correctly applied to the Zizyphus lotus of botanists, is the *Tamara* of India, and is perhaps identical with the Egyptian Bean of Pythagoras. Every part of this plant has a name and a use amongst the Chinese. It has numerous associations with Buddhism. Large lakes and pools are planted with the jointed stems (藕根 understood by the Chinese to be the roots), and the fruits (蓮實), leaves (荷葉), and underground, creeping, jointed stems are collected in due time. The latter operation is a very dirty one, as the stems are buried deep in the mud at the bottom of the lakes, from which the water is usually drawn off. The flower (荷花 or 芙蓉) with its red-tipped, pinkish-white petals, is seldom gathered, plants being placed in large jars for ornamental purposes. The petals of a flower, with the horary characters of the person traced upon one of them, were formerly swallowed by women in the throes of difficult labour, as a certain relief. The carefully dried, beautifully yellow fragrant stamens (蓮鬚) of the flower are brought from Yuchau in Honan to Hankow. They are used as an astringent remedy, and as a cosmetic article. The seeds (蓮子) are brought, specially, as a medicine, and as an article of dessert, from Fuhkien, Kwang-sin fu in Kiangsi, and from Kwang-p'ing fu in Pehchihli. The kernels (蓮薏) are very starchy and pleasant when boiled in soup, or roasted. They are also eaten raw. They are supposed to be good for spermatorrhœa and hæmatemesis. As sold in the streets these nuts might be mistaken for acorns. The creeping stem when cut across show a series of chambers in the solid tissue, concentrically arranged, and terminating at the joints which interrupt them at every foot, or less, of the length of stem. These stems are sliced and boiled, and much enjoyed by Chinamen. By grating and levigating them the native arrow-root (藕粉) already described is largely prepared in some districts. The leaves when dried are purchased by the Chinese grocers to wrap up some of their goods. They are officinally prescribed in the *Pen Ts'au* as remedies in fevers, dropsies, fluxes, and hœmorrhages. Even the leaf-stalks (荷鼻) are assigned some therapeutical value in certain movements of the fœtus in the gravid uterus, which are frequently referred to in the *Pen Ts'au* as something very serious. From these stalks curious bundles of spiral vessels are said by Dr. WIGHT to be extracted in India and used as wicks for the lamps of the shrines of the gods on solemn occasions. The stalks of the curious receptacle, in which the carpels are embedded, resembling the broad nozzle of a watering-pot (called 蓮蓬), are a popular remedy for hæmoptysis, a frequent symptom with the Chinese. The Npmphœa alba (白 蓮 花) is alluded to in the *Pen Ts'au* as a plant of the West, introduced by people of Central Asia and but little known. It is said to render the faces of the aged fair and comely when taken for a long time!

**LUCRUBAU (CHAULMUGRA) SEEDS.**—大 風 子 (*Ta-fung-tsze*).—These seeds are imported into China from Siam. The large tree which yields them is common in Cambodia, Siam, the Indian Archipelago, Malaysia, Assam and other parts of Eastern India. The whole order (Pangiaceæ), to which this Gynocardia odorata belongs, is tropical and poisonous. The large, round, indehiscent, succulent, capsular fruits, compared by the Chinese to the Cocoa-nut, contain very many matted, ovoid, irregular, compressed, grayish-brown seeds. They vary from half to three-quarters of an inch in length, and have a hard, woody shell, enclosing an oily yellowish albumen, within which are large, heart-shaped, leafy cotyledons. They are often united together in masses of two or three seeds, by portions of the dried coherent pulp. The Indian nuts are somewhat different from the Siamese samples, the testa being smooth, thin, and fragile in the former case. *Chaulmugra* and *Petarkura* are Indian names for the drug. A fixed oil, having a peculiar and slightly unpleasant smell and taste, may be procured, according to Dr. WARING, from these acrid, deleterious seeds, which very much resemble the Mylitta lapidescens (雷 丸). They are described in Chinese books as good for leprosy, lepra, itch, pityriasis, psoriasis, syphilis, lipoma, vermes, and chaps upon the backs of the hands. Oil is not made from them in this part of China. What is called 大 風 油 (*Ta-fung-yu*), is directed to be made by exposing the crushed seeds to a moderate heat until the mass becomes a dark extract. Calomel and the Robinia amara root are used with the seeds, both externally and internally in the treatment of leprosy, the scurvy of the East. At the present time the extract is very occasionally used here as an outward application. Dr. HOBSON reports favourably of the drug in mild, early cases of leprosy. He gave one-drachm doses of the powdered oily nucleus twice a day for some months, and the expressed oil was rubbed on the affected patches. Salines were occasionally given as well. Little faith is put in the drug in Hupeh, but it is in great repute as a remedy for parasitic pediculi, and the itch-insect, of which the Chinese have very correct notions. Some of the Chaulmugra seeeds in Chinese shops would seem to be the Indian *Necrulimootoo* of Ainslie, the Hydnocarpus venenatus of the same order as the Chaulmugra, which has been found almost equally useful in the treatment of leprosy with the Chaulmugra remedy. The powdered seeds make a very excellent addition to sulphur ointment in the treatment of itch.

**LUNAR CAUSTIC.**—銀 硝 (*Yin-siau*).—This name is coined as indicating the metal (silver) from which the preparation is made, and the fact that it is a nitrate, or of a similar composition to nitrate of potash.

**LYCIUM.**—地 骨 皮 (*Ti-kuh-p'i*) 枸 杞 子 (*Kau-ki-tsze*).—See *Berberis Lycium.*

**LYCOPERDON GIGANTICUM.**—馬 勃 (*Ma-peh*).—Species of Puff-ball and Truffle are met with in Central China. The brown, broken, globular masses of this species of Lycoperdon, said to vary from the size of a Chinese bushel to that of a peck, are met with in the drug-shops here in a dried and decayed state. They are full of the reddish-brown, powdery spoers, which are employed as a dusting-powder, after careful sifting. They are given in affections of the gullet, larynx (aphonia), lungs, and in hæmorrhages. Sugar and honey are taken with this powder.

**LYCOPERDON SQUALMATUM.**—卷柏 (*Kiuen-peh*).—The whole plant of this fungus, with its mass of brown fibrous roots, and green, branching, curved, compressed fronds, with furrowed, acuminate, hygrometric scales, is likened by the Chinese to a fir. It grows to the height of some six to eight inches on stones, and is collected for medicinal use at Ningpo, although it is met with all over China. A large trade is carried on in all sorts of drugs between Hankow and Ningpo, second only to that between Siang-tan and Hankow. It is given as an emmenagogue, cordial, deobstruent, and tussic remedy. When scorched or dried artificially, astringent properties are assigned to this harmless substance.

**LYSIMACHIA.**—常山 (*Ch‘ang-shan*).—The identification here given is Tatarinov's and is doubtful. This popular, simple medicine is not always kept by the regular druggists, as it belongs to the class of *Shan-yoh*, or common "hill-drugs," within everybody's reach. The plant belonging to the Primulaceæ, is probably named after a mountain of the same name in Chihli. The shoots and coarse roots are emetic, expectorant, deobstruent, and alterative. This medicine is now frequently used in the treatment of ague. Species of Striga (Scrophulariaceæ) are included under this name or heading in the *Pen Ts‘au*. Lysamchia nummularia is sometimes called 黄繁縷 (*Hwang-fán-lú*) and is a favourite remedy with lying-in women, and in the treatment of skin-diseases.

## M

**MACCARONI.**—麪筋 (*Mien-kin*).—A glutinous preparation is made from wheat-flour by kneading and washing with water to get rid of the starch. It is squeezed into short lengths, and is reckoned to be very nutritious, being a part of the diet of priests, and those fasting from animal food. A kind of maccaroni, very much more like foreign macaroni, is made from bean-curd, and is called 豆筋 (*Tau-kin*).

**MACE.**—豆蔻花 (*Tau-k‘au-hwa*) 玉菓花 (*Yuh-kwo-hwa*).—This excellent spice, being the false aril, or arillode, investing the shell of the nutmug-kernel, is rarely met with in Hankow. It is unknown to the druggists here, nor do the books refer to it so far as known. It is put by Dr. Williams amongst the imports.

**MADDER.**—地血 (*Ti-hiueh*).—This term "earth's blood," more properly applies to Alkanet-root (Anchusa). See *Rubia*.

**MAGNESIA.**—飛甘石 (*Fi-kan-shih*).—Tatarinov speaks of a Carbonate of Magnesia under the name of 爐甘石 (*Lú-kan-shih*). What is sold in Hankow under this name is a kind of calamine, or carbonate of Zinc. The name is here adopted for simple magnesia, with the addition of the word *Fi*, denoting any very light or finely levigated powder.

**MAGNESIA, CARBONATE OF.**—花乳石 (*Hwa-jü-shih*).—See *Dolomite*.

**MAGNESIA, SULPHATE OF.**—苦消 (*Ku-siau*). See *Epsom Salts*.

**MAGNETIC OXIDE OF IRON.**—鹽生 (*Yen-sang*).—HANBURY describes a coarse, black, sand-like powder, strongly attracted by the magnet, under this name. It is unknown in Hupeh, but probably comes from Shansi or Pehchihli. A kind of saltpetre is more generally called by this name in Chinese writings.

**MAGNETIC IRON ORE.**—慈石 (*Ts'ze-shih*).—Very fine Magnetic Oxide of Iron, with nearly pure metoric iron, is brought from Ling-shih-hien and Lu-ngan fu in Shansi, and from near Teng-chau fu in Shantung. It is also found in the south of China. This oxide is known as the triferro-tetroxide or ferroso-ferric oxide of iron, and is of the same composition as the black oxide, formed when iron is strongly heated. The Chinese term "maternal stone" indicates the attraction of the mineral. Stories are told of ships being unable to pass over places where this mineral existed at the bottom of the water. Its properties are much the same as those of the iron compounds in general. It is, perhaps more frequently used at present as a tonic or aphrodisiac than any of the ferruginous minerals. HANBURY gives 靈磁石 (*Ling-ts'ze-shih*) as the name of a similar substance.

**MAGNOLIA HYPOLEUCA.**—厚朴 (*Hau-p'oh*).—The quilled bark of this tree originally imported from Cohin China, is now to be got at Kwei-chau fu (Sech'uen), and from places in Shensi, Hunan and Kiangnan. The rough, thick bark is rolled into large tight cylinders, from seven to nine inches long, and very thick. The outer surface is of a greyish-brown colour, roughened with tubercles, and marked with lichenous growths. The inner surface is smooth, and of a reddish brown colour. The taste is aromatic and bitter, but much of it is almost inert. It is used as a deobstruent, tonic, and stomachic remedy. It is given in fevers sometimes. The seeds or cones are used in fistula ani.

**MAGNOLIA RUBRA.**—赤朴 (*Ch'ih-p'oh*).—This is the bark of a species of Magnolia, held in much esteem, brought from Sech'uen and Ngan-hwui. It is in thick, short quills of a reddish-brown colour, and bitter to the taste.

**MAGNOLIA YULAN.**—辛夷 (*Sin-i*) 迎春花 (*Ying-chun-hwa*).—The cones and buds of this splendid flowering-tree are collected at Han-chung fu (Shensi) and at Kin-hwa fu (Chehkiang). The large white flowers appear before the leaves, "welcoming the spring," as the second name signifies. The flossy carpels, or unopened buds (苞), when stripped of their woolly coverings have a strong, aromatic and bitter taste. Carminative, cephalic, stimulant, diaphoretic and eliminating qualities are ascribed to them. A kind of snuff was formerly made from the powdered drug. All diseases of the nose are said to be benefitted by the preparations of the drug given in the *Pen Ts'au*. Other species of Magnolia are found in China.

**MAIDENHAIR.**—石長生 (*Shih-chang-sang*).—The Adiantum Capillus Veneris plant is met with in Hien-yang hien (Shensi), and in other places, where it is collected as a drug, not in much use at the present time. It is said to be slightly deleterious, and useful in fevers, vermes, and impetiginous disorders of the skin. The plant has emetic properties.

**MAIZE.**—玉蜀黍 (*Yu-shuh-shu*).—This grain, introduced probably from Japan, where it is honoured with a place on the armorial bearings of the state, is now largely cultivated in all parts of China. It is called 玉高粱 (*Yuh-kau-liang*) and 包穀 (*Pau-kuh*) in books. The Pekingese term it 玉米 (*Yuh-mi*) and it is called 粟米 (*Suh-mi*), or 包粟 (*Pau-suh*) in the southern provinces. In Formosa it is called 番麥 (*Fan-meh*, foreign corn). In Japan it is call *Nan-ban-kibi* (南蠻稷) or "millet of the southern barbarians." Mr. Mayers has collected very interesting matter upon this subject in No. 6 of the "Chinese Notes and Queries," for 1867. Large portions of the population depend upon this grain. It is parched or ground and made into meal for making cakes. It is prescribed as a means of making a gruel or drink in all sorts of urinary disorders.

**MALACHITE.**—緑青 (*Luh-ts'ing*), 石緑 (*Shih-luh*).—The native carbonate of copper, a beautifully green mineral, is one of the ores smelted by the Chinese. It it met with in, or brought from Shwui-chau fu in Kiangsi, Lu chau in Sech'uen, Lin-ngan fu and P'u-rh fu in Yunnan, Hing-ngan fu in Shensi, King-men chau and Siang-yang fu in Hupeh, Nan-yang fu in Honan, and from Fung chau in Hunan. 石青 (*Shih-ts'ing*) is apparently but another name for this mineral which is the "blue-stone" of China. It is used as a paint, and to make ornaments, some of the mineral being beautifully veined. Medically it is employed as an astringent, emetic, expectorant, escharotic and detergent drug. Formerly it was given to patients suffering from apoplexy (痰瘋) supposed to depend upon phlegm. It is now confined to external use.

**MALLOW.**—See *Althœa* and *Hibiscus.*—The Common Mallow is not known here.

**MALT.**—麥芽 (*Meh-ya*).—See *Barley-sprouts.*

**MANGANESE.**—礞金 (*Mung-kin*).—The Chinese know nothing of this metal. The ores of iron going under the name of *Wu-ming-i* or the Limonite of minerolagists, contains manganese. Chin chau in Hunan furnishes manganiferous ore of this nature. The name given here is coined. Epidote, containing manganese, is met with in Yunnan, according to Dr. Williams.

**MANGIFERA INDICA.**—檬菓 (*Mung-kwo*), 芒菓 (*Mang-kwo*),—The root-bark of this delicious tropical fruit, called *Amra*, or *Mahaphala* in India, is said by Lindley to be an aromatic bitter, good for diarrhœa and leucorrhæa. He reports the seeds to be anthelmintic. In India Dr. Waring reports that powdered Mango-seeds are an excellent remedy in lumbrici, and that strongly astringent qualities, dependent upon the presence of a large proportion of gallic acid, recommend the powder for use in menorrhagia and bleeding piles. The *Pen Ts'au* describes a fruit under the name of 菴羅菓 (*Ngan-lo-kwo*), or 菴摩羅迦果 (*Ngan-mo-lo-kia-kwo*), which may be the Mango fruit, sometimes put down in botanical works as a Spondias. Emmenagogue properties are referred to it under this heading, and cooling properties assigned to the leaves. See *Myrobalani Emblici.*

**MANGOSTEEN.**—山竹菓 (*Shan-chuh-kwo*).—See *Garcinia mangostana.* Schmidt has found tannin, resin and a crystallizable principle (Mangostine), in the rind of this fruits, confirming Dr. Waring's favourable report of this remedy in chronic dysentery.

**MANGROVE BARK.**—栲皮 (*K'au-p'i*—The bark of this swamp-loving tree, the Rhizophora of botanists is confounded with that of the Ailanthus. The tree is not known to grow in China, but large quantities are imported into Ningpo, according to Mr. Bowra, from Siam and

Singapore. It is used in China to dye, or to tan the sails, cordage and nets of sailors and fishermen. It has failed in England to satisfy the curriers, although the bark, with the fruits and the root of the tree, all abound in tannin. The bark of this tree is lighter in colour than that of the Ailanthus. It makes as good a decoction for washing indolent ulcers. or suppurating surfaces as oak-bark, and is much improved by the addition of a small portion of alum.

**MANNA.**—甘膏 (*Kan-kau*).—An account is given in the *Pen Ts'au*, under the head of 甘露 (*Kan-lu*), or "sweet dew," of a reddish substance resembling the Manna of Briancon, and like it, produced upon Coniferous trees. The bamboo and the rush are also said to produce this most propitious substance, sent from heaven in good times. 甘露蜜 (*Kan-lu-mih*), a similar saccharine substance, is described as occurring on a small plant in Sech'uen, Samarcand and Arabia. Under the head of 刺蜜 (*Ts'ze-mih*), or 草蜜 (*Ts'au-mih*), a clear honey-like substance is spoken of as coming from Tangut, and produced upon a leafless plant, called 羊刺 (*Yang-ts'ze*), suggested by Dr. BRETSCHNEIDER to be Atraphaxis spinosa, or horny Polygonaceous shrub. The *Hu* people are said to call this honey, or manna, 給孛羅 (*Kih-poh-lo*). The Manna of the Tamarix is called 檉乳 (*Ch'ing-ju*). Similar properties are referred to these saccharine substances as are set down in foreign works. Some of these mannas are believed to be produced by an insect, named by Ehrenberg Coceus manniparus, found upon a Tamarix yielding the Persian Manna, called *Gen.*

**MAPLE-GUN.**—楓香 (*Fung-hiang*). See *Rose-maloes* and *Storax.*

**MARBLE.**—桃花石 (*T'au-hwa-shih*).—This species of limestone, of various colours, is brought from Ju-ning fu and Chang-teh fu in Honan, Shau-king fu in Canton province, and from Yunnan, North Shansi, North Western Chihli Shantung and Fuhkien. It is made into inkstones, curiosities, false gems, and articles of furniture. Table-tops and seats are made and sold for foreign use, or for exportation. See *Marble Levigated.*

**MARBLE LEVIGATED.**—光粉 (*Kwang fen*).—The name "clear powder" properly belongs to White Lead, for which another heavy carbonate (marble) is substituted by the Chinese, the cleverest adulterators in existence. Marble is coarsely crushed, pounded and carefully levigated, and the produce, a beautifully fine, white cake of powder, enclosed in a chip box. The boxes weigh from two to three ounces. It is used to adulterate paint, to whiten rice and as a cheap cosmetic. It makes a good addition to white-wash, increasing the body of the white colour. Is is prescribed in diarrhœa and dysentery.

**MARIGOLD.**—金錢菊 (*Kin-ts'ien-kiuh*).—This orange-yellow Composite flower, the Calendula of botanists, is not clearly distinguished by Chinese writers from another Composite plant, the Inula or Elecampane. It is forced successfully by the Chinese florists, and is a common ornament in shops during the early spring. Its properties are believed to be carminative, sudorific, laxative and diuretic. It is used as an eye-wash.

**MASSICOT.**—鉛丹 (*Yuen-tan*) 黃丹 (*Hwang-tan*).—In the *Pen Ts'au* no distinction is made between this yellow monoxide of lead, and the triplumbic tetroxide, or red oxide, called Minium. It is directed to be made by heating lead, or by adding sulphur, nitre and vinegar to melted lead. Shwui-chau fu in Kiangsi is a place supplying this preparation, which is very pure, and is set down as an astringent, neurotic, antifebrile, antiperiodic, alterative and anthelmintic drug. Eyewashes, lotions, dusting-powders, plasters and ointments are made of it. It is mixed in with the ingredients for making corrosive sublimate. Lead-palsy is spoken of in Chinese medical works. By heating, this powder becomes oxidised, and is thus treated to manufacture minium.

**MATRICARIA CHAMOMILA.**—野菊花 (*Yé-kiuh-hwa*).—The heads of this Composite wild flower are used to make eye-washes and lotions. They may be used in the place of the Chamomile.

**MEDICAGO RADIATA.**—苜蓿 (*Muh-suh*).—This Leguminous forage plant, sometimes called the "herdsman's root," would appear to flourish in Shensi, having been introduced there from Ferganah by Chang K'ien of the Han dynasty. Several things have been brought into Western China from Central Asia, which have at the same time been indigenous in other portions of the country, without the knowledge of the persons introducing them. In this way several native plants and fruits are found by modern observers growing on the soil of China, which bear the prefix of 胡 (*Hu*), or 夷 (*I'*) from having been once ignorantly introduced to some part of the once divided country as positive novelties to some. Mowings of the herbage of the plant for the feeding of cattle were formerly practised by Chinese farmers three times a year, and the curved legumes were eaten as food. Laxative, demulcent, and nutritive properties are referred to the hay of the plant, and the root is given in jaundice and lithiasis.

**MEDLAR, JAPANESE.**—See *Eriobotrya* (*Mespilus*) *Japonica.*

**MEDLAR.**—金林子 (*Kin-lin-tsze*), 金鈴子 (*Kin-ling-tsze*).—Tartarinov describes the seeds of Mespilus Japonica as 川楝子 (*Ch'un-lien-tsze*). This name really refers to the seeds of a Melia-tree, from Sech'uen. He also gives *Kin-lin-tsze* and *Kin-ling-tsze*, as written above, for the Medlar. They are in fact synonymes of this same *Ch'uen-lien-tsze*, and have nothing to do with the Medlar, which is probably not known in China.

**MELANTHIUM COCHINCHINENSE.**—天門冬 (*T'ien-men-tung*).—The tubers of this trailing plant, possibly named after a district in Hupeh, are brought from K'ien-chau fu in Fuhkien, but the plant is met with in Kwangtung, Chehkiang, Kiangnan, and other provinces. It is common in Cochin China. The tubers are spindle-shaped, fleshy, translucent, of a reddish or yellowish colour, and vary from two to five inches in length. Some are much older and more woody in structure. They are flattened, contorted, furrowed longitudinally, and have a central perforation in many cases, showing that they have been strung on a cord for purposes of drying. They have no decided odour, but the taste is something like that of the squill. Sweetmeats are prepared from them, and they are used as a drug in diseases of the chest, debility, and in stomachic affections. They have much the same effect as squills, for which they may be substituted.

**MELANTHIUM** (?)—百部 (*Peh-pū*), 野天門冬 (*Yé-t'ien-men-tung*).—The tubers of a plant belonging to Melanthaceæ are brought from Lien-chau fu in Canton province, and go by the name of the wild Melanthium. The drug is sold in the shape of brown, dried, shrivelled pieces, from two to four inches long, and much smaller then the Melanthium Cochinchinense.

They have a sweetish taste, and are credited with expectorant, antiphlogistic, anthelmintic, and vulnerary properties.

**MELIA.**—川楝子 (*Chʻuen-lien-tsze*)—A fleshy, globular drupe, about three-quarters of an inch in diameter, covered with a shining yellow skin, usually much shrivelled, is brought from Sechʻuen, and named after that province. The drupes contain a stone, grooved longitudinally, marking the division of the interior into six or eight cells, some of which are abortive. The fruit is given in fevers, delirium, hernia, and in the *Kan* disease of children. This may be the fruit of the Melia Azadirachta (or Azadirachta Indica) of the Indian Pharmacopœia, the Nim or Margosa Tree of India. They yield in India a bitter oil, used as an anthelmintic, and applied externally in rheumatism. Nim leaves are used as a poultice, and the bark of the tree is given in the intermittent fevers of India.

**MELIA AZADIRACH.**—楝子 (*Lien-tsze*), 苦楝子 (*Ku-lien-tsze*), 金鈴子 (*Kin-ling-tsze*).—The Bead-tree yielding this fruit, called by these three names, is very common in Hupeh. The unequally-bipinnate leaves are used by dyers and weavers to dress cloth and satin. The branches are sometimes worn at the dragon-boat festival. The fruit is a five-celled berry, yellow when ripe, and dark and shrivelled when kept for any length of time. They are much smaller than the *Chʻuen-lien-tsze*, measuring about half-an-inch across. They contain a stone, furrowed longitudinally by five or six ridges. The taste is bitter, and they are, like the leaves, said to be deleterious, but driving away infection. The root of the tree, or its bark, is very bitter and is used in the treatment of skin-diseases. The kernels or fruit are used in fevers, vermes, fluxes and urinary affections. The root has emetic properties.

**MELISSA.**—紫蘇 (*Tsze-su*).—A kind of balm or fragrant Labiate plant, or plants, is used under this name as a warm stimulant, stomachic, carminative, derivative, and tonic remedy. An essential oil, called 蘇子油 (*Su-tsze-yú*) is spoken of in the *Pen Tsʻau* as having the same properties as the Oil of Spike used as a varnish, or by painters on porcelain, &c.

**MELODINUS.**—山橙 (*Shan-chʻang*)—The M. monogynus, an exception to the generally poisonous character of the Apocynaceæ, or Dog-banes, has an edible fruit in India. It is said to be found in China, but is unknown to the Chinese here.

**MENTHA.**—薄荷 (*Poh-ho*).—See *Mint.*

**MERCURY.**—水銀 (*Shwui-yin*), 汞 (*Hung*).—This "water-silver" is now largely imported into China, a good deal being used in Hankow for making mirrors and mercurial preparations such as vermilion and calomel. Under some circumstances mercury is occasionally exported. Yu-yang chau and Lung-ngan fu in Sechʻuen, Lien chau in Kwangtung, Kwei-yang fu, Sze-nan fu, Tʻung-jin fu, Ngan-shun fu, Tú-yun fu and Tsun-í chau in Kweichau, Wu-chang fu in Hupeh, Chang-sha fu, Fung chau and Shin-chau fu in Hunan, and Kiái chau in Kansuh all supply quicksilver in some quantity. It is prepared by heating native cinnabar, and the product is packed in gourds, bamboo-joints or stone jars. Large quantities are made up into drugs. The Chinese have long been fond of studying alchemy, including the changes undergone by mercury in the fire. Before the Christian era they had made considerable progress in these studies, now entirely thrown aside. They have, however, borne this fruit, that very many mercurial preparations are empirically produced on a large scale, for use in the treatment of disease. Mercury is supposed by the Chinese to exist in some of the Amaranthaceous plants. Mercury is set down in medical works as very deleterious, and belonging to the *Ying* or germinal principle. The power to become immortal was anciently affirmed of this metal. It is little used here except as an ingredient in ointments to destroy lice. It is sometimes taken by prostitutes to prevent conception.

**MERCURY, NITRIC OXIDE OF.**—紅升藥 (*Hung-shing-yoh*) 紅升丹 (*Hung-shing-tan*).—This is a mixture of peroxide of mercury and a little nitrate of mercury. It is not commonly distinguished from the *Hung-fen* or Red Oxide next described. It is made by fusing a mixture of cinnabar, nitre, realgar, alum, sulphate of iron and sometimes red lead, and condensing the sublimate in the same simple way as calomel is described to be made. Mercury is sometimes used in place of the cinnabar, and many variations are practised empirically by the various operators. The uses are the same as the next, which see.

**MERCURY, RED OXIDE OF.**—紅粉 (*Hung-fen*) 三仙丹 (*San-sien-tan*).—A very well-made Red Precipitate is sold in Hankow under these names. As three ingredients, nitre, alum and mercury, invariably enter into the recipes for making this oxide of mercury, it is called *San-sien-tan* after three of the eight genii, or eight jolly immortals, whose names are often given to drugs. The nitre is put into a small boiler and melted, the alum being afterwards melted and incorporated with it. The mercury is put into the middle of the mass, and after covering it over with a dish, the whole is heated for about an hour and a half. No woman, dog, or fowl may look on during the operation! The heat is at first gentle, and then gradually increased. The simplicity of the apparatus used in these processes, in Hankow, is very striking. The shallow iron bowl is merely covered down with an earthenware plate, and carefully luted down with mud mixed with salt, a brick being put upon the top of the plate to prevent any displacement. The red oxide is obtained as sublimated scales of a bright brick-red colour, smooth and shining on one surface, and rough on the other. It is wholly volatile, and as a rule yields no nitrous fumes on heating. It is applied in a powdered state to buboes, ulcers, and sores to draw out the poisons, and is an ingredient in the issues (藥線) put into sinuses and open carbuncles. It is supposed to remove sloughs and to quicken the growth of granulations. In this way salivation is often brought about, from the absorption of the mercurial into the system.

**MERCURY, NITRATE OF.**—黃升藥 (*Hwang-shing-yoh*).—This bright yellow preparation of mercury, made by heating and subliming a mixture of red lead, mercury, sulphate of iron, and nitre, is sold in Hankow in scales or fragments, smooth and marked with portions of unchanged mercury on one side, granular on the concave surface from the presence of red peroxide of mercury. The lead is added from medical, and not from chemical considerationy Sulphate of soda, confounded with nitre, is sometimes used in this process, which commonly yields impure nitrate of mercury, or finely divided amorphous yellow nitric oxide of mercury. It is probable that a kind of Turbeth Mineral is prepared and sold under this name of *Hwang-shing-yoh*. This preparation is never used internally, but is applied to wounds in much the same way as the oxide.

**MERCURIAL POWDER.**—五虎丹 (*Wu-hu-tan*).—A metallic powder, consisting of three mace each of sulphate of iron, alum, nitre, quicksilver and verditer, is sometimes prescribed as an escharotic, or corrective application to cancerous, carbuncular, specific and chronic sores and sinuses. Its name "Five tigers' specific" would denote that it had formerly been prepared as a sublimate, having the composition it may be conjectured of red nitric oxide.

**MERCURY, (SULPHURET OF) AND SULPHUR.**—靈砂 (*Ling-sha*), 二氣砂 (*Rh-k'i-sha*). This black sulphuret of mercury, also called 黑砂 (*Heh-sha*), is identical with the Æthiops Mineral of European pharmacy. It is made by melting two (Chinese) ounces of sulphur, and then adding to it half a catty of mercury. Vinegar is sometimes used in the process. The melted mass is taken out and powdered, and properly sublimed. Sulphur, cinnabar, and mercury are sometimes employed to make this drug. It is sold in heavy, broken pieces of a brilliant maroon, or purplish red colour, and crystalline or striated in structure, with more or less of the same substance in powder. Nitric acid has no effect upon it. This drug is affirmed to have all sorts of marvellous properties, being produced by the union of the seminal essence of the sulphur with the germinal qualities of mercury. It is given in pyrosis, dyspepsia, colic, cardiac disorders, cholera, apoplexy, dysmenorrhœa, and general debility in either sex. It is more frequently used as an internal remedy than any other mercurial preparation.

**MICA, GOLDEN.**—金星石 (*Kin-sing-shih*) 金精石 (*Kin-tsing-shih*).—This laminated brown mineral is a good specimen of mica, brought from Sze-chau-fu in Kweichau and from Kiangnan. It is powdered and given in hæmorrhages and other diseases of the lungs. Iron pyrites, the native Bisulphide of iron, is called by this same name *Kin-sing-shih*.

**MICA, SILVER.**—銀星石 (*Yin-sing-shih*) 銀精石 (*Yin-tsing-shih*).—The mineral indicated by these names should be a silvery white mica, brought from Taichau in Shansi. The samples usually consist of a beautifully green, transparent mica, brought from Nganhwui. It is used to make inkstones and ornaments for ladies. This and the Golden Mica have much the same properties assigned to them in Chinese works. They were formerly used in the treatment of leprosy.

**MICACEOUS EARTH.**—青礞石 (*Ts'ing-mung-shih*).—This greenish-black micaceous mineral is obtained from Wu-chang-fu in Hupeh, and places in Kiangsu. It is little used at the present time, being employed in making curiosities and ornaments. It is believed to remove phlegm and obstructions in the belly. Similar properties are ascribed to two other micaceous earths, 金礞石 (*Kin-mung-shih*), a brownish mineral, and 銀礞石 (*Yin-mung-shih*), a greyish-green substance. Many of these micaceous minerals might be exported from China to Europe to manufacture the beautiful material used for purposes of ornamentation, made from mica laid upon various surfaces.

**MICHELIA CHAMPACA.**—瞻博 (*Chen-poh*) 詹波 (*Chen-po*), 占婆迦 (*Chen-p'o-kiu*).—The tree known to the people of India as the *Tsjampac*, or *Tchampaka* has very fragrant yellow flowers, and an edible fruit. It is a native of China, and its bark is used with that of other Magnoliaceæ, to adulterate cinnamon. The bark has been used in the Mauritius with some success, in the treatment of the low intermittent fevers of that island.

**MIDSUMMER ROOT.**—半 夏 (*Pwan-hia*).—Two or three Aroid plants are gathered in the middle of summer, and sold as 生 半 夏 (*Sang-pwan-hia*), or "crude midsummer root." It is largely grown in all parts of Hupeh, and inferior sorts come from Shantung and Kiang-nan. They are soaked and dried frequently until the poison is exhausted, and then cut into slices, or made into a powder. It is then called 法 半 夏 (*Fuh pwan-hia*). Pinellia tuberifera, Arisœma ternatum, Arum macrorum, and probably other Aroid plants are used in different places to prepare this very common drug. They are met with in Hankow as small, spherical balls, flattened on one side, or pyriform, or avoid, and from three-tenths to six-tenths of an inch in length. The surface is white, or yellowish-white, and little dark pits are dotted over the greater part of the tuber, more especially round the umbilicated depression which marks the flat surface. The interior of these tubers is beautifully white, dense and amylaceous. They have little smell or taste in the prepared state, although bitterish, acrid and deadly qualities are referred to the (raw) drug in the *Pen Ts'au*. In the fresh state it acts as an emetic and diaphoretic. The prepared drug is given in fevers, rheumatism, apoplexy and renal diseases. It is said to remove phlegm of every kind. When powdered the drug seems to act after the manner of colchicum. It has been used for a long time in the Hankow Medical Mission Hospital as a substitute for the sulphate of potash in the preparation of Dover's Powder.

**MILLET.**—See *Holcus Sorghum*, *Setaria* and *Sorghum Saccharatum*.

**MILK.**—牛 乳 (*Niu-jü*) 牛 奶 (*Niu-nai*).—The milk of the black yellow cow being sweeter, is preferred, although the milk of the buffalo is richer in cream. Milk is directed to be just boiled before taking it. It is recommended in the debility of of convalescence, indigestion, jaundice, diarrhœa, molluscum, ranula and other diseases. The millers of large towns keep the large yellow cow to grind their flour, and an excellent milk is to be obtained in this way. The Zebu ox (犎 牛) and the Yak (犛 牛) or Bos grunniens yield milk in Thibet, Mongolia, and some other parts of the Chinese empire. On the whole cow's milk is not so much thought of as in former days.

**MIMOSA SAPONARIA.**—肥 皂 莢—See *Acacia Concinna.*

**MIMOSA SENSITIVA.**—怕 癢 花 (*P'a-yang-hwa*).—This beautiful plant is common in Chinese gardens, but is not used in medicine. Mr. Bowra reports that the bark of a Mimosa is used at Ningpo in tanning nets and sails. This is probably the Acacia Nemu (合 歡), or Mimosa arborea of Loureiro. It has some detergent, but little astringent property.

**MINERAL WATERS.**— 温泉 (*Wan-ts'iuen*).—Springs of mineral water in China are generally of the class of thermal springs, or solfataras yielding sulphurous gases, steam and warm water. The warm character of these waters, which have alone attracted the attention of the Chinese, is indicated by the generic names *Wan-ts'iuen*, 温 湯 (*Wan-t'ang*), 沸 泉 (*Fuh-ts'iuen*). At about fifty miles distant from Chefoo (Shantung) hot sulphur-springs, called 東 湯 (*Tung-t'ang*), are met with. They resemble those of Atami in Japan, and are useful in skin-diseases, and the contractions or pains of rheumatism and other diseases. The hot springs of *Yung-mah* (雍 陌) situated on the main island of Hiang-shan, at a distance of about twenty miles N. N. W. foom Macao, have a temperature of about 170°. The water, which contain salt, sulphate of soda, chloride of calcium, but no magnesian salt, has been found very serviceable in skin-diseases. In the gypsum-districts of the division of *Ying-ching* (應城) in Hupeh, there are several warm, medicinal springs resorted to by the sick. Salt and fibrous gypsum come from these places in Ying-ching in large quantities. 黃山 *Hwang-shan*, a hill to the west of Hwui-chau fu city in Nganhwui, has cinnabar-springs which are reddened at times, and are hot enough to made tea. A clear, hot spring is met with at 驪山 (*Li-shan*), near Si-ngan fu (Shensi) and is called 礜石泉 (*Yú-shih-ts‘iuen*). Arsenical springs are spoken of in the *Pen Ts‘au* as resorted to, but very dangerous. At the 廬山 (*Lú-shan*), near Kiukiang (Kiangsi) are warm springs once much vaunted for their efficacy in syphilitic, leprous and eczematous disorders. They were entered just after a meal, and bathed in for some time until profuse sweating occurred. At the and end of ten days the disorders were cured, after this single bath. At 醴縣 (*Li-hien*), in Shensi there is, or was, a carbonated spring called 醴泉 (*Li-ts‘iuen*), or 甘泉 (*Kan-ts‘iuen*), whose water encouraged vegetation, and induced longevity. These "sweet springs" were affirmed in olden days to gush forth in halcyon times. The water was taken as a cooling, stomachic and corrective remedy. As a rule these sweet springs were drank, and the *Wan-t‘ang* used as baths. To the S.E. of the city of Hoh-king chau, in Li-kiang fu (Yunnan) these are said to be warm mineral springs, formerly much esteemed in the treatment of abdominal tumours. See *Solfátara* and ***Asses Glue.***

**MINIUM.**—紅丹 (*Yuen-tan*) 丹粉 (*Tan-fen*) 朱粉 ,(*Chü-fen*) 紅丹 (*Hung-tan*).—The Chinese do not ordinarily distinguish between the two oxides of Lead. Massicot and Minium, which they know can be produced at pleasure by the coutinued calcination of the metal, first into litharge or massicot the monoxide, and then into the red triplumbic tetroxide, the substance in question. It is a very pure oxide, of a brilliant red colour, and very heavy. It comes from Canton, and places in Kiangsi, and is exported to some extent. It is used to adulterate or to replace vermilion, and is employed by glass-makers and painters to a certain extent. The names *Tung-tan*, *Wei-tan*, given by HANBURY for impure minium and a character used by TATARINOV (which probably stands for cinnabar from Shin-chau fu in Hunan) cannot be made out here. Certain very disgusting preparations called 紅鉛 (*Hung-yuen*), made from the menstrual discharge, might be mistaken for some salt of lead. To the credit of the compiler of the *Pen Ts‘au* he rejects these filthy things.

**MINT.**—薄荷 (*Pah-ho*).—Several well-flavoured species of Mentha &c., are found in China, as the Cat-mint, Peppermint (龍腦薄荷) Pennyroyal (胡薄荷), and according to BURNETT Mentha hirsuta, M. Crispa and M. Canadensis. Carminative, antispasmodic, stomachic, astringent, sudorific and alexipharmic qualities are affirmed of these very useful, but homely plants. The leaves are dried and used to make tea, and as remarked by Dr. BRETSCHNEIDER, are often so highly desiccated as to be nearly useless.

**MISTLETOE.**—櫟斛 (*Lih-huh*).—Thers is a Chinese speciese of Viscum growing upon the oak, the juice of which is used as a tonic. The mistletoe is called 冬青 (***Tung-tsing***) in Manchuria, This is a mere general epithet, applied to many evergreen trees or plants. As the word *Lih* is applied to any dead, useless wood, good only for fuel, fungi and perhaps orbids are included under this term. See *Viscum* and *Willow-epiphyte.*

**MIXTURE OF CAMPHOR.**—樟腦水 (*Chang-nau-shwui*).—Borneo Camphor-water is used in dystocia, and slices of camphor wood are sometimes steeped in water by the Chinese.

**MIXTURE OF CHALK.**—畵粉水 (*Hwá-fen-shwui*).—See *Chalk.*

**MIXTURE OF IRON.**—調經藥水 (*T'iau-king-yoh-shwui*).—The Chinese understand the relation of ferruginous medicines to menstrual and other diseases of the blood. This has been probably suggested to them by the red colour of the oxides of iron. Something like GRIFFITH's Mixture, containing iron and myrrh, is met with in books of formulæ.

**MOMORDICA BALSAMINA.**—苦瓜 (*K'u-kwa*).—This bitter, oblong, acuminate fruit, marked with longitudinal rows of oblong tubercles, with the intervening spaces crowded with smaller tubercles, is eaten by the Chinese in its green state. At it ripens it becomes of a beautiful red colour, and eventually bursts. In this condition it is drastic in its effects, and may be substituted for Elaterium, a dangerous drug for Chinese patients. This Cucurbitaceous plant is sometimes called 癩葡萄 *Lai-p'u-t'au*, or "the lepers grape," from some fancied resemblance between the fruits and the tuberculated condition of the subjects of leprosy.

**MONKSHOOD**—烏頭 (*Wú-t'u*)—See *Aconite.*

**MORPHIA.**—鴉片精 (*Ya-p'ien-tsing*).—This name "essence of opium" is suggested in place of the wretched transliterations of the word morphia into Chinese, given in Anglo-Chinese works.

**MOTHER-CLOVES.**—母丁香 (*Mú-ting-hiang*).—These are the fruit of the clove-tree, somewhat larger than the common clove. They have been lately imported into China from the Straits, and are said by Dr. WILLIAMS to be used by the poor Chinese as a cheap substitute for the buds. Chinese authors assert that it has the power of causing the gray beard and moustache to become black.

**MOUNTAIN ASH.**—棠梨 (*T'ang-li*).—See *Grewia Elastica.*

**MOUTAN PÆONY**—牡丹 (*Mau-tan*).—See *Pæonia Moutan.*

**MUCILAGE**—水膠 (*Shwui-kiau*).—Chinese mucilage is very good, and is usually made from seaweed, having the capital addition of a little alum. The Hibiscus okro, Hibiscus manihot, the Bungtalai fruits, and the Peach-gum (桃膠) or Plum-tree gum, (樹膠) all afford excellent material for making mucilage. For ordinary purposes of the dispensary good rice-congee makes a very good menstruum for drugs, such as bismuth. A few grains of boiled rice are always relied upon by Chinese scholars for sticking together paper surfaces, instead of the expensive mucilage-bottle, which is not one bit more effective than the rice, always at hand.

**MULBERRY-BARK.**—桑根白皮 (*Sang-ken-peh-p'i*).—The mulberry has been cultivated for long ages in China, which is fortunate in having two trees, the tea and the mulberry, whose very leaves are a store of wealth. Morus Indica, M. Atropurpurea and M. rubra are met with in China, but the M. alba (白桑 or 地桑) or northern mulberry, and the M. nigra (荆桑) southern mulberry, are favourite and frequent kinds. The Chinese varieties do not correspond exactly to European descriptions, many varieties having been produced by cultivation. 山桑 (*Shan-sang*), the hill-mulberry, 金桑 (*Kin-sang*), the golden mulberry,

雞桑 (*Ki-sang*), the fowl-mulberry, and the 桋桑 (*I'-sang*), or Morus Tatarica are names of species or varieties out of a multitude given in the many works devoted to this subject. The coarse reddish roots of the black mulberry are stripped of their outer covering, and the whitish liber given in various forms as a remedy in hæmoptyis, uterine hæmorrhages, diseases of the lungs and stomach, epilepsy and convulsions in children, worms, cancer and many other maladies.

**MULBERRY-EPIPHYTE**—桑上寄生 (*Sang-shang-ki-sang*).—The woody branches of an epiphyte growing on the mulberry-tree are highly prized by the Chinese, and grossly adulterated as a consequence. It is described as a plant two or three feet high, with round, thick, slightly-pointed leaves, scabrous on the under surface, and bearing a yellow flower, with a fruit of the size of a small bean. It is bought from Sech'uen, Kiangnan and other provinces. It is given in disorders of the pregnant and puerperal states.

**MULBERRY-FRUIT.**—桑椹 (S*ang-shin*).—The Chinese divide the mulberry into those which do, and those which do not bear berries. The white species bears little fruit. The black fruits are described as beneficial in dropsies and struma. The juice is given in febrile affections the disorders of drunkards, and in rheumatism. It is prescribed as a wash for baldness and scalled head. The Chinese pretend that the seeds procured from the excrement of ducks and fowls fed upon the berries, produce plants more likely to grow to leaf instead of fruit, and therefore more suitable for silkworm-rearing. The Syrup of Mulberries does not keep well in any tropical climate.

**MULBERRY PAPER.**—皮紙 (*P'i-chi*).—Dr. Medhurst gives 柘 (*Che*) as the name of a Morus (Broussonetia) papyrifera. See *Paper*, and *Paper Mulberry*.

**MUNJETH.**—茜草根 (*Si-ts'au-ken*).—See *Rubia cordifolia* (*munjista*).

**MURICIA COCHINCHINENSE.**—木鼈子 (*Muh-pieh-tsze*).—The nummular seeds of this Cucurbitaceous plant are compared by the Chinese to small crabs. The red fruit contains some thirty to forty of these flat seeds, obscurely triangular in some cases, of a dark or light brown colour, having a double row of tubercles at the margin, and the testa fragile, roughened and sometimes coarsely reticulated. They vary from three-quarters to one and a quarter of an inch in diameter, and contain two large cotyledons, oily, green on the outside, and yellow internally. The drug comes from Canton, Chehkiang and Hunan, and is prescribed in struma of the neck, mesenteric enlargements, bruises, swellings and ulcers.

**MUSHROOMS.**—香菌 (*Hiang-kw'au*).—Large quantities of Fungi are eaten by the Chinese of every province, and have some medicinal or dietetic properties assigned to them. The Polypori, or Boleti, are generally preferred to the Agarics, so largely eaten in Europe. 鬼蓋 (*Kwei-k'ai*), or 地蓋 (*Ti-k'ai*) are edible Agarics, or Helvellæ, and perhaps include poisonous sorts. They are burnt and applied to swellings or sores. 地耳 (*Ti-rh*), is probably an Agaric, said to be tonic and virile in its effects. The 木耳 (*Muh-rh*), are a numerous class of parasitic fungi growing on trees. They are much eaten. They come from Ching-ting fu in Pehchihli, Shun-king fu and Sui-ting fu in Sech'uen, Li-p'ing fu in Kweichau, Yun-yang fu in Hupeh, and from Shang chau and Han-chung fu in Shensi. Manchuria and the Amur country supply a portion of this food. The 石耳 (*Shih-rh*), is a Polyporus brought from

Fung-t'ien fu in Shingking, Hwui-chau fu in Nganhwui, Nan-kang fu in Kiangsi, and from Lai chau iu Hunan. 土菌 (*T'u-kw'an*), or 地蕈 (*Ti-tan*), are Agarics or Amanitas, or answer to the "toad-stools" and other injurious fungi. Some of them are said to cause irrepressible laughter. Alum and chicory are reported to be antidotal to their poison. Japanese mushrooms appear in the tariff as 東洋香菰 (*Tung-yang-hiang-ku*). See *Fungi.*

**MUSK.**—麝香 (*Shié-hiang*).—Musk is the dried secretion of the preputial follicles of a species or two of antelope or hornless deer, commonly referred to the Moschus Moschiferus of LINNÆUS. The animal (香麞) is met with in Thibet, Annam and Central India. It resembles the Chevrotain, or Gazelle, but is smaller, and the hair coarse, brittle and of a dark brown colour. It is said to feed upon the leaves of Coniferous trees, and to eat snakes after stupefying them with its peculiar odour. The musk is brought from Si-lung chau (Kwangsi), Wu-ting chau (Yunnan), Pau-king fu and Yung-shun fu in Hunan, Ho-nan fu (Ho-nan), Sih chau and Liau chau in Shansi, Mau chau (Sech'uen), and from P'ing-liang fu, Liang-chau fu, Ts'in chau and King-yang fu in Kansuh. The timid animal is hunted in the rutting season, and in the early winter, when the musk is strongest. Good musk is in irregular, unctuous, light, dry, reddish-black or dark purple grains, concreted in a slightly oval bag, about one and a half inches in diameter, hairy on one side and not on the other. They weigh from two hundred to twenty-five grains apiece. The small, dark bags with the greyish hairs arranged evenly round the centre are the best. The taste is bitter and aromatic, and the smell penetrating and peculiar. Dr. WILLIAMS says that "the trace, when rubbed on paper, is a lively yellow, and no grittiness is felt or residue left." Adulterations are frequent. Indian musk is inferior to the Chinese, and a bad sort comes from Russia. It contains ammonia, stearine, oleine, cholesterine and a volatile oil, and is soluble in alcohol and ether. The best test is the strength of its alcoholic solution. It is believed by Chinese authors to be a rousing, stimulating, antispasmodic, deobstruent, expectorant, diaphoretic, ecbolic, anthelmintic and vulnerary remedy. It is sometimes used as a poison by suicides, and enters into the composition of ointments for dressing ulcers and sores. Dusting-powders and ink are scented with it. The flesh is eaten by the dwellers on mountains where the animal frequents.

**MUSTARD.**—See *Sinapis alba.*

**MUTTON.**—羊肉 (*Yang-juh*).—The sheep is not common in China, especially south of the Yang-tsze. Large numbers are driven slowly southward from Mongolia. The long wool is shorn in some parts of China. Mahommedans consume mutton, which is only introduced occasionally at Chinese tables. Mutton-broth (羊肉湯) is advised in the *Pen Ts'au* as good for pulmonary diseases, abdominal obstructions, debility, and for parturient and suckling women. Mutton is too dear for common use even in Hupeh, where it is more then twice as dear as beef.

**MYLABRIS CICHORII.**—斑蝥 (*Pan-mau*), 斑猫 (*Pan-mau*).—This Coleopterous insect is common in Southern Europe, Egypt, India, (where it is called the Telini fly) and in Shansi, Shantung, Hupeh, Hunan, Nganhwui and other provinces of China. They are of a black colour, marked with three waving bands, the upper band being imperfect and generally represented by three or four round detached spots, and are about three-quarters of an inch long and one quarter of an inch broad. They are met with on species of Faba, Dolichos, Euonymus, Silene and other plants, having different names on different plants, and varying probably in their specific characteristics. The Mylabris Schonherli is one of them. An insect met with on the Zizyphus is called 棗貓 (*Tsáu-mau*). The Mylabris is gathered in the autumn and dried for use. It is reputed to be emetic, diuretic and antidotal. It is taken internally in scrofula, syphilis and rectal diseases, and is given to persons for purposes of abortion, contrary to the Tartar Code. It is the grand remedy of the Chinese faculty for hydrophobia, a disease by no means common in China, in spite of the street-plague of ill-conditioned dogs met with all over the empire. The mad dog is supposed to have impregnated the bitten person, and the little dog, the product of this conception, is sought for in the urine rendered bloody by a large dose of the powdered mylabris, digested in wine. Recovery is thereupon considered certain. The powdered drug is applied as a stimulant to buboes, chronic ulcers, lepra, moles and many other diseases of the skin. It enters into the composition of *Yé-ming-sha*, a preparation of Bat's dung used in the treatment of eye-diseases. This insect has all the properties of the Cantharis, and has been long and successfully used in Anglo-Indian practice. See *Red Lady-bug.*

**MYLITTA LAPIDESCENS.**—雷丸 (*Lui-hwan*).—This fungus resembles the truffle and other underground plants of this great class, well represented in China, and yielding many dietetic and medicinal substances. It has been described by the Chinese as the *Fuh-ling* (Pachyma) of the bamboo, and its name of "thunder-balls" is given to it from its asserted powers of destroying worms and casting out devils, a numerous class in China. It occurs in irregular, rounded globules, from four to ten lines long, and sometimes matted together. They roughly resemble the fruit of the Gynocardia odorata (*Ta-fung-tsze*). They have a slight pedicle attached to one or both poles, and are sometimes met with joined together like a roll of imperfectly divided pills. They weigh from ten to two hundred grains each. The outside is of a dark or greyish brown colour, and finely reticulated, and the broken surface of the interior is dense, granular, slightly mealy, and of a dirty brown or pinkish colour. They have little smell or taste. They are dug up from the ground in Yun-yang-fu in Hupeh, and places in Sech'uen, Shensi and other provinces. They are similar to the vegetable substance dug up out of the chalk-beds in the mountains separating Travancore from Tinnevelley. They are recommended in worms, many infantile diseases, and in impotency. They are powdered and dusted upon the skin in some cases of disease of that neglected surface.

**MYROBALANI EMBLICI.**—阿摩落伽果 (*A-mo-loh-kia-kwo*).—The acrid fruits of Emblica officinalis (Euphorbiaceæ) a plant confounded in Buddhist books of the Chinese with the Mango and Hog-plums, and used in India as a remedy in diarrhœa, dysentery and cholera. See *Terminalia Chebula.*

**MYRRH.**—沒藥 (*Muh-yoh*) 洋沒藥 (*Yang-muh-yoh*).—A reddish-brown, or opaque blackish mass, adulterated with foreign substances, is sold under this name in Chinese drug-shops. It has a bitter taste, and but little of the smell of genuine myrrh. Persia is spoken of as the source of the best myrrh. It is confounded with elemi, although a fair description of the tree (Balsamodendron Myrrha, Burseraceæ), and of the mode of collection, is given in the *Pen Ts'au.* The tree is said to grow in the south of China. The uses of the drug are much the same as those of olibanum, being employed as a vulnerary, styptic, astringent, sedative and alterative. The Chinese market is supplied from Bombay, but a good quality of the drug would probably sell well in Central China. See *Oil of Myrrh.*

## N

**NAPTHA.**—猛火油 (*Mang-ho-yu*).—A kind of Naptha, or Rock-oil, resembling Rangoon Tar, and described as very corrosive, penetrating and volatile, is spoken of in the *Pen Ts'au* as coming from Corea. It is said to be very inflammable, taking fire when added to water, and destructive to fish. It is obtained by distilling or heating shale of a bituminous nature, or some of its paraffin products. At Tung-shao, near Tamsui, in Formosa, there are wells yielding some sorts of paraffin, or thick bitumen, differing from the Rangoon and American Rock-oils. These Napthas were formerly used by the Chinese and other peoples as a sort of Greek Fire. During the war of 1842 between China and England, quite a large quantity of Sech'uen naptha, collected from the "fire-wells" of the salt-producing districts of that province, was brought down and stored at Ningpo, for the purpose of destroying the British fleet. See *Bitumen, Paraffin, Petroleum* and *Rock-oil.*

**NATRON.**—鹻 (*Kien*).—This is a native carbonate of soda brought from Thibet and Mongolia by way of Kalgan. The Chinese confuse Natron and Nitre, as other nations have often done. See *Soda, Carbonate of.*

**NELUMBIUM SPECIOSUM.**—See *Lotus.*

**NEPHELIUM LITCHI.**—荔枝 (*Li-chi*), 丹荔 (*Tan-li*).—This excellent fruit remarkable for being found in an order (Sapindaceæ) of poisonous plants, is brought from all parts of China, not excluding Shingking. The sun-dried fruits are largely exported from Fuhkien and Canton provinces, being in some demand as a marriage-present or dessert at feasts. The pulp is sweet, and the leaves are officinal as a remedy in the bites of animals.

**NEPHELIUM LONGAN.**—龍眼 (*Lung-yen*).—This fruit called the "slave of the litchi," from its inferiority to the latter fruit, comes from Fuhkien, Kwangtung and Kwangsi, and is more easily raised than the litchi. The globular fruit, compared to "dragon's eyes," is reputed to be nutrient, stomachic and anthelmintic, and is supposed to quicken the memory and intelligence, a remedy much needed in China. Another kind of Nephelium, called 龍荔 (*Lung-li*), is found growing south of the Meiling range, and is described in the *Pen Ts'au* as resembling both the longan and the litchi, as the name would indicate.

**NETTLE.**—蕁麻.—See *Urtica Dioica.*

**NIPHOBOLUS LINGUA.**—石韋 (*Shih-wei*).—The lanceolate, pointed fronds of this fern, some of them being fertile, are found in Chinese drug-stores, mixed up with moss and roots.

They are prescribed as a pectoral, diuretic and astringent remedy, in spite of their tasteless and inert character. The word *Wei* is more usually applied to reeds. Under the head of Filices, or Ferns. Tatarinov mentions a drug called in Chinese 骨碎補 which is brought from Fung-tsiang-fu in Shensi. This and 金星草 brought from I-chang-fu (Hupeh), are classed along with the Niphobolus as sedges, or rushes.

**NITRE.**—消石 (*Siau-shih*). See *Saltpetre.*

**NUTGALLS.**—五倍子 (*Wu-pei-tsze*).—These are the galls produced upon the Rhus semi-alata (Anacardiaceæ), a tree of the same genus as that which yields a part of the varnish for which the Chinese and the Japanese have been so long celebrated. This excrescence, called in India *Kakra-singie*, is produced by a Coccus, and is said to sometimes attain the size of a man's fist. They are usually met with as hard, brittle, oblong, horn-like, hollow, contorted bodies, about an inch and a half long and resembling a sea-shell. They are pointed or tapering at either end, or triangular, irregular and tuberculated. The outer surface is velvety, of a yellowish or lightish brown colour, the thin wall somewhat translucent, and the interior smooth and occupied by the remains of the insect. They are steamed to kill the insect, and are exported to Europe. They are collected in Fung-tiʻen-fu (Shingking), and Sui-ting-chau (Sechʻuen), amongst other places. The Japanese have a smaller kind, and the Indian gall, produced upon the Rhus succedanea, met with in the Himalayas, is more cylindrical. These galls are used by dyers and tanners to produce a black colour, or are mixed with cochineal and other colouring substances (according to Dr. Williams) to produce gray, brown and fawn tints. They are the principal ingredient of a kind of Imperial electuary, very highly rated and only obtainable as a gift from the throne. The Chinese use it as an expectorant, astringent and corrective remedy, and it is applied topically to chancres, swellings and wounds. The *Pei* should be the character for "prepared" (備) the *Wu* (five) standing for the five great viscera of the body. The name would then mean the preventive drug for warding off visceral diseases.

**NUTMEG.**—肉豆蔻 (*Juh-tau-kʻau*), 肉果 (*Juh-kwo*), 玉果 (*Yuh-kwo*).—The nutmeg (Myristica Moschata) is said to have come from *Hu-kwoh*, a country of Central Asia, from Kwanlun and from Ta-tsʻin-kwoh. The tree is now grown in Kau-chau-fu and Kwang-chau-fu in Canton province. The fruits are imported from Singapore. The usual samples are olive-shaped, dry and worm-eaten. The Chinese compare the plant to the cardamom, and hence one of its names "fleshy cardamom." It is used as an astringent, antispasmodic, stomachic and anti-vinous remedy, and but seldom employed as a spice.

**NUX VOMICA.**—番木鼈 (*Fan-muh-pieh*), 馬錢子 (*Ma-tsʻien-tsze*).—This drug is brought from Sechʻuen, but it originally came from some Mahommedan country in Central Asia. As the bright red fruit of the plant resembles that of the Muricia, it is sometimes confounded with that inmocuous plant. The orbicular, downy, hard seeds of this shrub are compared by the Chinese to money, or to the brass ornaments at the junctions of the pieces of the horse's bridle. They are commonly used to poison dogs, and are forbidden to be sold to strange persons. It is recommended as a drug in ague, fevers, throat-affections and abdominal enlargements. It enters into the composition of ointments for the dispersion of swellings, and the powder is blown into the throat in the treatment of cynanche.

**NYCTANTHES ARBOR TRISTIS.**—紅茉莉 (*Hung-moh-li*).—This plant, the *Hursinghar* of India, remarkable for its smelling so strongly at night only, is used as an ornament, and as a red dye in China, as in India.

## O

**OAK**—槲 (*Hoh* or *Huh*).—It would be difficult to give a general term for the oak-tree, of which there are several kinds in China. Quercus Cornea, described by LOUREIRO, is met with in Cochin China, Hongkong and southern China. Its fruit is confounded with that of the Aleurites, and is edible. The Quercus mongolica of FISCHER, growing in Manchuria and northern China, is called 柞樹 (*Tsoh-shü*). The silkworm of the north is fed upon its small leaves which distinguish it from the large-leaved species, the Quercus dentata of Thunberg, called by the same name in Chinese. This latter tree is met with in Japan as well, and is distinguished by the long feathery filaments on the outside of the cup of the acorn. It is sometimes called 槲 (*Hoh*). The leaves are not given to silkworms. Quercus Chinensis is met with in the northern and other parts of China, grows to the height of fifty feet, and bears its fruit in long pendulous spikes. Quercus Fabri of Hance is a new Chehkiang species. Quercus Ilex and Quercus serrata are both called 櫟 (*Lih*), and yield coarse, strong wood. Quercus serrata under the name of *Kunogi*, is used in Japan to feed silkworms. The oak is not commonly allowed to mature in China, and is therefore not held in such high estimation as a timber-tree. It is grown all over China, and its wood furnishes good charcoal. From the similarity of some of the spiny fruits of the oak to those of the chestnut, the two trees are constantly confounded. Oak-leaves, called 槲若, have been at times used as a tea-leaf, and are regarded as astringent and cooling. Acorns have recently been proved to be sometimes poisonous in England.

**OAK-BARK**—槲皮 (*Huh-p'i*).—This excellent internal and topical astringent remedy is applied to the same uses in China as in England. As the trees are stripped when young the bark is small and strong. It is tolerably cheap in Hankow. Tanning is wretchedly managed by the Chinese.

**OAT.**—雀麥 (*Tsioh-meh*), 野麥 (*Yé-meh*).—This "wild corn," or "bird-wheat," is seldom cultivated in China, although in times of dearth it is collected and made to yield a bread. It is thought to be demulcent, laxative and nutrient. A gruel made of it is given to parturient women to excite uterine contractions, as in retained placenta. It is possible that here we have something like ergot of rye.

**OCHRE, RED.**—赤土 (*Ch'ih-t'u*).—This ochreous clay is used as a pigment, and is applied as a dusting-powder to burns, scalds, itchy and herpetic eruptions. A soft hæmatite also goes by this name.

**OCHRE, YELLOW.**—黃土 (*Hwang-t'u*).—This substance is to be carefully distinguished from 土黄 (*T'u-hwang*), a caustic preparation of arsenious acid. See *Loess* and *Yellow Ochre.*

**OIL OF ALMONDS.**—杏仁油 (*Hang-jin-yü*).—See *Almond, Sweet.*

**OIL OF AMBER.**—琥珀油 (*Hu-peh-yü*).—Unknown to the Chinese.

**OIL OF ANISE (STAR).**—八角油 (*Pah-koh-yü*).—This oil is said by Dr. WILLIAMS to be made by distilling the fruit in small retorts, a picul producing about seven catties of oil. It is sent to Europe and America in tin-lined cases. The oil is pale and warm or sweetish to the taste. It becomes solid at about 50°. The common anise oil (小茴香油) is not known in China.

**OIL OF APRICOT-SEEDS.**—杏仁油 (*Hang-jin-yü*).—A fine oil is said by Sir J. DAVIS to be extracted from apricot-kernels in the north of China, but nothing is known of it here.

**OIL OF BEANS.**—豆油 (*Tau-yü*).—This oil is expressed in large quantities in the north of China, and at Newchwang, by natives and foreigners, the latter using machinery. The Dolichos soja is the bean used, although the oil is miscalled Pea Oil, a name best given to the sweet oil obtained from the Arachis, or Pea-nut. The oil is dark, not very palatable, and has some tendency to cause sickness. It is brought to Hankow by foreign steamers, and is now largely consumed as a food here, the natives sending away the Tea Oil from Hunan to the north, where a good price can be got for the latter article.

**OIL OF BENZOIN.**—安息油 (*Ngan-sih-yü*).—A fragrant, oily preparation is sold under this name, but is not the Liquid Benzoin, which it might be presumed to be. Dr. WILLIAMS says it comes from India, and is used in making ointments and plasters. It is probably Liquid Storax, or the Rose-maloes of commerce. See *Benzoin, Liquid.*

**OIL OF CABBAGE.**—菜油 (*Ts'ai-yü*).—This oil, a kind of Colza Oil, is expressed from the seeds of the Brassica Sinensis, in increasing quantities all through the valley of the Yangtsze, and of the Han. The oil is of a dark yellow colour, thick and has a pleasant odour. The taste is warm. It makes good lamp-oil, and is largely used by Chinese cooks, and as a hair-oil. It is purgative to some extent, and is applied to sores, ulcers and swellings. It is inferior to the oil of the Camellia, or Tea Oil, for illuminating purposes, although it is frequently substituted for it. This is the Olive Oil of Dr. WILLIAMS' "Ch. Com. Guide." Japan supplies this oil sometimes.

**OIL OF CAMELLIA.**—茶油 (*Ch'a-yü*).—This is a thinnish, yellow oil, less fragrant then the cabbage-oil, but it makes an excellent lamp-oil, and may be used in dispensaries in China in place of olive oil. Large quantities of this oil come from the hilly districts of Hunan and Kiangsi, where the Camellia oleifera grows in abundance. The Chinese call this plant by the same name as the tea-shrub, and this oil is sometimes spoken of as tea-oil, a misnomer.

**OIL OF CAMPHOR.**—腦油 (*Nau-yü*).—Oily or uncrystallizable camphor is obtained in Formosa in the form of a yellow, strong-smelling liquid. which exudes from the camphor stored in vats to the extent of three or four cent, according to Mr. TAINTOR. It is scarcely saleable, and is altogether inferior to the oil obtained from the Dryobalanops Camphora, on the west coast of Sumatra, where the oil dripping from the split timber of the tree felled to procure the Baros camphor is sold at the low price of a Dutch guilder for a large quart wine-bottleful. It forms a capital embrocation for use in rheumatism, paralysis and sprains.

**OIL OF CHAULMUGRA.**—大風油 (*Ta-fung-yú*).—See *Lucrubau Seeds.*

**OIL OF CINNAMON.**—桂皮油 (*Kwei-p'i-yú*).—This volatile oil, obtained from the leaves and twigs of the Cassia, or Cinnamon, is made in Canton, and regularly exported. It is used as a perfume and flavouring ingredient. Cassia oil closely resembles the genuine oil of cinnamon, which is largely prepared in Ceylon.

**OIL OF CLOVES.**—丁香油 (*Ting-hiang-yú*).—A well-made, pale, redish-brown oil is made in Canton, and occasionally exported. It is a heavy oil, and resembles the Cinnamon-oil from Çeylon. None of these essential oils are known to the old medical writers in China. They are nearly all made at Canton, and are obvious imitations of European preparations.

**OIL OF COCOA-NUT.**—椰子油 (*Yé-tsze-yú*).—The Chinese are not acquainted with this oil. It is aperient in large doses, nutrient and may be used for liniments. It is inferior to the ground or pea-nut oil, and to the sesamum-seed oil.

**OIL OF COD'S LIVER.**—魚肝油 (*Yu-kan-yú*).—The Chinese do not, as far as known, extract oil from the liver of any fish, but there is an oil called 油鰺 (*Yu-san*), prepared from the entrails of a fish. Large quantities of a fish resembling the cod are caught off Chehkiang coast in the sixth or seventh (Chinese) months. The cod has never been met with in Chinese waters. Cod Liver oil does not act so admirably in Chinese as in European cases.

**OIL OF COTTON-SEEDS.**—綿油 (*Mien-yú*).—The oil expressed from Cotton-seeds is used in villages in food and for lamps. It has an unpleasant taste. It is used medicinally as a demulcent, and is applied to lepra, scabious and some other skin-diseases.

**OIL OF CROTON.**—巴豆油 (*Pa-tau-yú*).—The drastic oil is put to much the same medical purposes in China as in Europe, judging by the books.

**OIL OF FISH.**—魚脂 (*Yu-chí*)—The oil obtained from the porpoise, which frequents the Yangtsze river as far up as Hankow, is used to make putty to caulk ships, and to burn in lamps. A yellow oil obtained from a small fish, called *Hwang-ku-yu*, has a strong fishy smell, and is used to destroy pedicular, parasitic and similar affections of the skin. It is much used in veterinary practice, a department of medical art which has an ancient literature.

**OIL OF GROUND NUT.**—花生油 (*Hwa-sang-yú*).—This oil is expressed from the Arachis hypogæa, or Pea-nut, in large quantities in Hunan. It has been extensively used in Anglo-Indian medical practice as a cheap, but very efficient, substitute for olive oil. Dr. Waring gives it a specific gravity of .916, but the Chinese article is not equal to Indian specimens.

**OIL OF HEMP-SEEDS.**—火麻仁油 (*Ho-ma-jin-yú*).—This oil has not been examined.

**OIL OF JUNIPER.**—柏子油 (*Peh-tsze-yú*).—This oil is not known to the Chinese. The name is coined.

**OIL OF LINSEED.**—胡麻油 (*Hu-ma-yú*).—The oil of the seeds of a Linum is used as a lenitive, pectoral, anthelmintic and alexipharmic, and as an application to bald and scalled heads. It is not procurable in Hankow.

**OIL OF MYRRH.**—沒藥油 (*Muh-yoh-yú*)—A reddish oil having the smell of myrrh is used in Cochin China to dress ulcers, according to LOUREIRO. It is unknown in China.

**OIL OF OLIVE.**—洋 橄 油 (*Yang-kan-yü*).—The olive does not grow in China, and this name is adapted from that of the Canarium, the fruit of which is sometimes mistaken for the olive. Ground-nut, or Camellia oil answer all the purposes of the foreign, expensive article.

**OIL OF PINE.**—松 㴯 (*Sung-i*).—A sort of Deodar oil, or coarse, fluid turpentine, procured by heating the wood, or pine-knots of some species of Pinus, is used as an external remedy for skin-diseases, as in India.

**OIL OF PEPPERMINT.**—薄 荷 油 (*Poh-ho-yü*).—A very good oil of peppermint is brought in small bottles from Canton where it is made from several excellent kinds of mint. It is applied to the forehead in headache, or is put into peppermint-lozenges to be sold on the streets. It is not equal to the English oil, but is sometimes exported. The Chinese admire this as a perfume.

**OIL OF PERSIMMON**—椑 柹 油 (*Pi-tsz'e-yü*).—This glutinous extract, or oil, is prepared from the fruit of the Diospyros Embryopteris, or Embryopteris glutinifera, which grows plentifully in Hupeh province. The fruits are as large as an apple, of a greenish or yellowish colour, and are very austere in flavour. They are crushed to obtain the dark, resinous, thick juice which makes a very excellent varnish. The best oil comes from Hing-kwoh chau and Lo-tien hien in Hupeh. As it is cheaper than wood-oil, it is much used in the varnishing of the paper umbrellas made near Hankow. An extract might be prepared from the fruit, as directed in the Indian Pharmacopœia. Such a preparation has been found very useful in India as an internal and topical astringent.

**OIL OF POPPY SEEDS.**—罌 子 油 (*Ying-tsze-yü*).—This oil is briefly mentioned in the *Pen Tsʻau*, but has not been met with in Hankow.

**OIL OF ROSES.**—玫 瑰 油 (*Mei-kwei-yü*).—This esential oil is used principally as a scent for hair-oil, so plentifully used by all Chinese women. Attar of Roses was formerly an article of so-called tribute, brought into China from various parts of Asia.

**OIL OF SANDAL-WOOD.**—檀 香 油 (*Tan-hiang-yü*).—A thick, yellow, fragrant oil is extracted from sandal-wood, and is much valued for its fine smell. It is used to falsify wood intended to be used in the carving of fans, &c., supposed to be made of genuine sandal-wood. The tree abounds in the Mysore country of India, where the government pays great attention to the protection of the trees, and the extraction of the oil, which is sold at annual auctions for exportation to China and Arabia. The natives of India attribute cooling properties to this stimulant oil, according to Dr G. BIDIE. It acts well in gonorrhœa.

**OIL OF STONE-CHESTNUT.**—石 栗 油 (*Shih-lih-yü*).—The fixed oil obtained by expression from the fruit of the Aleurites triloba, commonly called the Stone-chestnut in the south of China, is reported by Dr. O'RORKE to be superior to linseed-oil as an economic substance. He finds its medicinal action to be similar to that of castor-oil, but it does not cause nausea or pain, and is free from any unpleasant smell or taste. The fruits are collected and exported at Canton, but the oil has not been met with.

**OIL OF SESAMUM.**—脂麻油 (*Chí-ma-yú*), 芝麻油 (*Chí-ma-yú*).—From the two sorts of seed sold under the names of black and white sesamum seed, an expressed oil is obtained which is largely used by those Chinese who can afford it in cooking their food. It has an agreeable smell, and is hence called 香油 (*Hiang-yú*) by some. It is credited with laxative, cooling, anthelmintic, alexipharmic, emmenagogue and ecbolic properties. This oil keeps very well and makes a very good oil for use in the dispensary in place of olive oil. Known in India as Til or Jinjili Oil it has been found by Dr. WARING and others to answer all the purposes of olive oil. See *Sesamum Indicum.*

**OIL OF SUN-FLOWER.**—葵子油 (*Kw‘ei-tsze-yú*).—This oil is apparently known to the Chinese but is not used medicinally.

**OIL OF SWEET BASIL.**—蘇子油 (*Su-tsze-yú*).—A fine drying oil used in painting on porcelain, and for varnishing, is expressed from the seeds of an Ocymum or a Lavandula. See *Melissa.* The Labiates do not abound so much in China, but they are held in high estimation by the Chinese.

**OIL OF TALLOW-SEEDS.**—青油 (*Ts‘ing-yú*).—This oil made from the albumen of the seeds of the Excæcaria (Stillingia) sebifera, is clear but of a dark colour. It is obtained in the proportion of from fifteen to sixteen catties from one picul of berries. It is used to varnish umbrellas, to dress the hair, to fill lamps and to mix with the tallow of candles. It has emetic properties, and acts as a purge. It is given as a remedy in cases of poisoning. See *Tallow, Vegetable.*

**OIL OF TURPENTINE.**—篤耨香油 (*Tuh-nau-hiang-yú*), 松香油 (*Sung-hiang-yú*).—This oil is scarcely known to the Chinese. The name *Tuh-nau* sounds like an attempt at reproducing a foreign sound, such as *Kelon*, the name of the Sacred Pine of India. See *Turpentine.*

**OIL OF VITRIOL.**—硫磺油 (*Liu-hwang-yú*).—See *Acid, Sulphuric.*

**OILED PAPER.**—油紙 (*Yú-chí*).—Very useful waterproof paper is made all over China by brushing over paper on both sides with Castor-oil, or some other drying-oil. It answers all the purposes of oiled silk, and is so cheap that it may be freely used, and frequently changed, no small matter in the treatment of wounds in a warm climate.

**OIL SILK.**—油紬 (*Yú-ch‘au*).—The use of oiled paper has rendered the employment of silk for such purpose unnecessary. The article has never been heard of in fact.

**OINTMENTS.**—See *Unguentum.*

**OLEA FRAGRANS.**—桂花 (*Kwei-hwa*).—This exquisitely scented shrub is not put to any special use at the present time beyond its use as an ornament, and as a means of scenting tea. It is identical with the Osmanthus of LOUREIRO. It seems to share with Cassia the name of *Kwei*, probably first given to the Olea plant.

**OLEANDER.**—夾竹桃 (*Kiah-chuh-t‘au*).—This name of a very poisonous plant, very common in some parts of China, is given on the authority of Dr. MORRISON. The leaves are very astringent, from the presence of gallic acid. The Chinese say nothing about it at Hankow.

**OLIBANUM.**—乳香 (*Jú-hiang*), 桃乳 (*T‘au-jú*), 熏陸香 (*Hiun-luh-hiang*).—

This drug, sometimes confounded with Sandarac, is largely imported from Bombay and Calcutta into China in the usual form of pale yellow, oval, partly opaque, brittle tears, having the bitter, aromatic taste, and balsamic smell which recommend it for use as incense or perfume in Chinese temples and houses. Very inferior and much adulterated kinds are met with in the shops. India, Arabia, Persia and other countries have long supplied the resin to China, but the tree grows in China, and the drug is reported to come from Shau-king fu and Kau-chau fu in Canton province, from Tai-chau fu in Chehkiang, and from Han-chung fu in Shensi. Boswellia thurifera on the Coromandel Coast has certainly yielded this drug to China. Several names express in Buddhist Chinese the name of *Ganda-birosa* (Hind), a name applied to both olibanum and frankincense in China, as well as in India. Storax was formerly used to adulterate it, but it is now too cheap to call for such a practice. Stimulant, tonic, alterative, sedative, astringent and vulnerary properties are referred to this drug, which is used to some extent in making plasters and salves for dressing carbuncles and foul chronic sores. It was an old internal remedy in leprosy and struma. Indian practitioners have largely used it as a remedy for carbuncle, as an internal agent in the cure of gonorrhæa, and in lung-affections as a fumigation. It is worth trial in spermatorrhæa and certain vesical or urinary disorders for which the Chinese formerly gave it.

**OLIVE CHINESE.**—青果 (*Tsʻing-kwo*).—See *Canarium.*

**ONION.**—See *Allium cepa.*

**OPHIOPOGON JAPONICUS.**—麦門冬 (*Meh-men-tung*).—This Liliaceous plant yields a drug, which is brought to Hankow in large quantities from Yü-yau hien, and Hang-chau fu in Chehkiang province. It consists of the shrivelled, pale-yellow, soft, flexible tubers, from one to one inch and a half long, tapering at either end, and traversed by a central threadlike cord. The taste is sweet, and aromatic, and the smell agreeable. It is used as a pectoral, refrigerant and tonic remedy, resembling squill in its action, to some extent.

**OPIUM.**—阿芙蓉 (*O-fu-yung*), 阿片 (*O-pʻien*), 鴉片 (*Ya-pʻien*), 洋煙 (*Yang-yen*).—These words are all, except the last, intended to imitate the Arabian name for opium (Afioum), or the Persian name (Afioun). It is possible that the resemblance of the handsome flower of the poppy to that of the Hibiscus may have partly dictated the use of *Fu-yung.* Opium, coming perhaps from Arabia or Persia, has been known since the Mongol dynasty, at least, in China. In the Ming dynasty it came into more general use in medicine. The *Pen Tsʻau* describes its collection from the poppy just after flowering in a very clear way, and mentions the fact of its regular sale as a drug. It was then given as an astringent and sedative, in dysentery, diarrhœa, rheumatism, catarrh, coughs, leucorrhœa, dysmenorrhœa and spermatorrhœa, but generally in combination with other drugs. At the present time all this practice has dropped out, and the drug is branded with all the infamy and illegality which belong to the habits of opium-smoking and opium-eating. From the researches of Mr. HOBSON of Hankow, it appears that opium was a recognized product of the prefecture of Yung-chang, in the west of the province of Yunnán, in the year 1736. For twelve years the poppy has been grown to produce opium in Honan and Shansi, and the popular story in

Sechʻuen is that it was introduced there from India and Thibet some one hundred years ago. The poppy must have been long cultivated in China, and the introduction of the Indian drug by way of Canton merely prompted the use of the plant for this baneful purpose. Fully one-half of the best arable land in Sechʻuen is believed by Mr. Hobson to be given up in spring to the bearing of an annual crop of poppy. He has found that probably seven-tenths of the dwellers in towns in Sechʻuen are habitual opium-smokers, and that more than one-half of the country-people has fallen victims to this seductive and injurious habit. Indian opium called 公膏 (*Kung-kau*), or 廣土 (*Kwang-tʻu*), is being replaced by the native drug, although the price of the former and its name for better flavour are still kept up by the native preference for it. Sechʻuen opium, called 川土 (*Chʻuen-tʻu*), is produced to the extent of six thousand piculs annually, and can be produced at half of the price of the Indian drug in good years. The drug is made to imitate the Malwa and other forms of the foreign article, and has yielded Dr. R. A. Jamieson a percentage of 6.94 of morphia. It is liable to be adulterated with mud, sesamum and hemp seeds, and an extract from the fruit of Sophora Japonica, but is positively less extensively tampered with than foreign opium in general. The best Sechʻuen drug, according to Mr Hobson, comes from Kai-chau and Pi-hien in that province. More extract for smoking (煙膏 *Yen-kau*, or 熟煙 *Shuh-yen*, as it is called) is said to be got from the Sechʻuen opium than from the Indian product. Yun-nan opium, and that from Kweichau, are called 南土 (*Nan-tʻu*), all these forms of the drug being derisively spoken of as "dirt," or as 藥土 (*Yoh-tʻu*), "medicinal earth." This is a good quality of drug, but is perhaps not better than that from Kansuh province. The opium from Kansuh, Shensi and Shansi, is called 西土 (*Si-tʻu*), and yields a good extract. A large quantity of opium, some of it of a very inferior kind, is produced in Honan province, and largely consumed on the spot, according to Richthofen. Ying-ching-hien, and places in Hwang-chau-fu, all in Hupeh, produce the drug. Manchuria, and in fact all parts of the Chinese Empire, produce more or less of this crop, which is sown in the tenth month, and is secured by the third month of the next year. The drug is prepared on a large scale by mixing the ashes of the opium-pipes with the raw opium, which facilitate the making of the watery infusion, which is further filtered and evaporated to the consistence of a thin extract, which is combustible in the opium-pipe, held in the flame of a small lamp. Water disolves from one-half to three-fourths of ordinary opium, but nothing is lost by the Chinese practised manipulator. The extract is usually made by the keepers of the opium-saloons, who are heavily taxed and squeezed. The rich people and Buddhist priests make their own extract. The burning of this extract in an incomplete fashion, as is carefully practised by the Chinese, yields a smoke, containing sundry incomprehensible empyreumatic compounds unknown to the chemist, but producing by absorption into the pulmonary vessels a stimulant, or some perfectly indescribable effect, unknown to all but the actual smoker. Of the effects of this habit all have heard only too much. The moderate use of the pipe is not incompatible with the health of most of those who practise it. The positive necessity of improving or increasing the extract used leads to the loss of the volitional, digestive and sexual powers, or in other words to the gradual degradation of the man. That the habit may be suddenly and permanently broken off is a fact of frequent experience. The use of Ammoniated Valerian-tincture, the employment of Nux Vomica and other tonics, the temporary smoking of the powdered root of the Aucklandia Costus (廣 木 香) and above all the regular provision of wholesome food for both body and mind, are amongst the plans which may be adopted, along with occasional disciplinary measures, for the cure of a habit perfectly free from any mystery as to its cause or consequences. Prepared opium is exported from China at the present time.

**OPPOPONAX.**—白 芷 香 (*Peh-chi-hiang*).—It is probable that this drug has been known to the Chinese at some time or other, judging from the plate in the *Pen Ts‘au*, its association with other Umbelliferous plants, and other considerations. It has not been met with up to the present time. The Orris-root is usually sold as the *Peh-chi* drug.

**ORANGE, COOLIE.**—橙 (*Ch‘ang*).—This species of Orange is best grown in the south of China, and is known by its thin, yellow, closely-adhering skin and fine, but rather sharp flavour. The tree is large and thorny, but there is a smaller variety. Marmalade (橙 膏) is made from it. Stomachic, carminative, tonic and anti-vinous properties are ascribed to the fruit and the peel, and the pips are given in lumbago, according to the *Pen Ts‘au*. As these oranges are indigenous to China, they, with many other kinds of Citrus, have come into large use in medicine.

**ORANGE, MANDARIN.**—柑 (*Kan*).—The character 橘 (*Kiuh*), stands for the orange in general, and often for this red-skinned variety, the Citrus nobilis of books. The rind is remarkable for the loose threads connecting it with the endocarp. The fruit is smaller and sweeter than the coolie orange, and is the orange of Central China. It is used more as a dessert, and the peel is exported to Japan, to return in the form of sweetmeats. Another name for this orange is 朱 (*Chü*) or 沙 柑 (*Sha-kan*). Immature fruits are dried and used as medicine, as well as the peel of some varieties of this orange.

**ORANGE, SOUR.**—香 櫞 (*Hiang-yuen*).—Since writing the article on Lemon, an acid orange, differing from that described by Dr. BRETSCHNEIDER in No. 7 of the *Ch. Recorder*, for 1870, has been met with, showing that at least at the present time the Lemon is not properly called *Hiang-yuen*.

**ORANGE, SWEET.**—橘 (*Kiuh*).—The Citrus Aurantium, or Common Sweet Orange of the books, is the orange of India and China, and best answers to the Chinese descriptions of the *Kiuh*, as a particular kind.

**ORANGE-PEEL.**—陳 皮 (*Ch‘in-p‘i*), 紅 皮 (*Hung-pi*).—The peel of Citrus Aurantium, Citrus nobilis, Citrus Bigaradia and that of Citrus Margarita, called by Dr. WILLIAMS 柑, are collected and dried by boys, women and rag-shop keepers to sell to the druggists, who use enormous quantities of this very popular medicine. The Canton coolie orange-peel (廣 皮) is much esteemed, and sells at much higher price in Hankow. Peel from Chang-chau-fu in Fuhkien is much asked for. Kiangsi peel ranks next. Stomachic, stimulant, antispasmodic, antiphlogistic, antiphlegmatic and tussic qualities are attributed to this panacea of the Chinese doctor.

**ORANGE-THREADS.**—橘白 (*Kiuh-peh*), 橘羅 (*Kiuh-lo*).—HANBURY describes Orange-zest as the peel of some Citrus dried in very thin slices. It is really the dried threads of the fruit which cover the pulp of the Sweet Mandarin Orange, and are prolongations of the endocarp. They are largely used for much the same purposes as the peel.

**ORCHIDES.**—See *Dendrobium.* Under the name of 蘭 (*Lan*), a general term for gynandrous flowers, and those with a single flower on a peduncle, several Orchidaceous plants are vaguely described. Air-plants (Vanda, Aĕranthus, &c.,) are called 吊蘭 (*Tiau-lan*). Sometimes Orchis roots are sold by the same name as the Amaryllis.

**ORPIMENT.**—雌黃 (*Tsz'e-hwang*).—"Female yellow" or the native trisulphide of arsenic, called *Hartal* in India, is met with as a heavy, hepatic-yellow mineral. It is brought from Honan, Yunnan and Kansuh, and from Cambodia. It is used as an escharotic, vulnerary, alterative, deobstruent, expectorant and prophylactic remedy. It is used as a paint. See *Hartal.*

**ORRIS-ROOT.**—白芷 (*Peh-chi*).—This root of the Iris florentina is used in China more as a medicine than as an article of the toilet See *Iris Florentina.*

**OYSTER.**—蠔 (*Hau*).—Very excellent oysters are obtainable at Shanghai from the Saddle Islands, off that port. They are large but of fair flavour. Oyster-beds (蠔塘) are kept up, according to Mr. BOWRA, at the Nimrod Sound, off the coast of Chehkiang, by a system of low mud-walls, covered with stones upon which the oysters grow. The oysters are dried and exported. Oyster-shell (蠣壳 or 明瓦) is largely used in China, or that of any mollusk, to make the thin, semi-transparent, square, flat plates which are skilfully cut, after careful cleavage, and set in slight bamboo framework. These form the glazing of shutters and public lamps throughout the greater part of Central and Southern China. Paper sometimes displaces the shell, but glass is seldom used.

**OX-GALL.**—牛膽 (*Niu-tan*).—Laxative, stomachic and tonic properties are ascribed to this inert substance. The gall of almost every animal, not excluding man, is used in Chinese medicine, as courage is located in the gall-bladder, according to Chinese physiology. See *Cow Bezoar.*

**OXALIS ACETOSELLA.**—酢漿草 (*Tsoh-tsiang-Ts'au*), 醋母 (*Ts'au-mu*).—This well-known plant, with its sour, sensitive, ternate leaves, is met with all over China. Cooling, emmenagogue, astringent, styptic, diuretic and lithontriptic qualities are referred to the plant, and the juice is held to be antidotal of the mercurial and arsenical poisons, as well as beneficial when applied directly to burns, bites and eruptions.

**OXYMEL OF COPPER.**—銅緑漿 (*T'ung-luh-tsiang*).—This preparation is not known to the Chinese, but it makes an excellent application to fetid and chronic sores, so common in China, and for which a rich variety of remedies is always called for.

## P

**PACHYMA COCOS.**—茯苓 (*Fuh-ling*).—This Fungal growth, which is both a food and a medicine for the omnivorous Chinese, is met with in the form of large tubers, having a corrugated, blackish-brown skin, and consisting internally of a hard, starchy substance, of a white colour, but sometimes tinged with pale red or brown, especially towards the outside. The tuber is sometimes perforated by an irregular channel, lined with a red membrane, marking its attachment to some root. The tubers vary in size from that of a fist to that of a peck-measure. They are met with on the sites of old fir-plantations, or actually connected with living fir-trees. They would appear to have an aerial stem in some cases, but the Chinese confound them with the genuine root of a Smilax lanceolata, and the two substances are exported to India and elsewhere as China-root. The Burmese call it *Tsein-apho-taroup.* The best is the hardest and whitest. Ching-ting fu in Pehchihli, Ngan-king fu in Nganhwui, Hang-chau fu in Chehkiang, Li-p'ing fu in Kwei-chau, and In-chau fu in Shantung yield the drug. 伏神 (*Fuh-shin*), is another kind mentioned in books. The substance probably consists of pectine, and is free from smell or taste. Similar stuff is found in Japan, and in South Carolina, where it is called Indian Bread. It is ground up, mixed with rice-flour, and made into small, square cakes, which are hawked about all hot in the early morning in Hankow. They are set down as good in febrile and dyspeptic complaints. See *Smilax.*

**PANGOLIN.**—鯪鯉 (*Ling-li*).—This scaly ant-eater, the Manis Javanica of naturalists, is met with in Hupeh, Kiangnan, and the southern provinces. It is dark-coloured, more than two feet long, and covered on the back, limbs, tail and every part of the body, except the belly, with movable imbricated scales. The tail is long, and the tongue very mobile. It lives on flies, ants, &c., by catching them upon its out-stretched tongue. Sometimes it lies down as if dead, and as the flies collect upon its body it closes on them with its scales, and entering the water feasts upon the prey which floats up on the surface of the water, drowned by the maneuvre. The scales, called 穿山甲 (*Ch'uen-shan-kiah*), are roughly triangular, concavo-convex, and marked at the attached end with fine grooves, like those on shell-valves. They are brown and semitransparent, those of the tail being the finest. They were formerly given in all sorts and conditions of disease, not excluding skin-diseases. The principal use at the present time is to scratch itching surfaces, for which purpose they are fixed upon a length of bamboo as a kind of curry-comb. No evil consequences are said to follow the use of this instrument, which is largely called for amongst the prurient Chinese.

**PAPER.**—紙 (*Chi*).—The character for this important fabric, nowhere so extensively employed as in China, has been written with both the radical for cloth, and that for stone. Anciently bamboo-leaves scorched before a flame were used to write upon, and this material still contributes largely to the manufacture of the finished article of the present day. In the times of the Ts'in and Han monarchs coloured threads of silk were used to record events, and the character in constant use still retains the radical for silk. In the reign of the Han emperor *Ho-ti* the bark of certain trees came into use, being boiled to a pulp, along with silk, old fishing-nets and hemp-fibres, to make a paper which came into general use. Then as now, the materials employed varied greatly according to the locality. The use of printing-blocks in the sixth century after Christ led to the extensive making of paper, in which the Chinese have ever since continued to excel. The delicacy of their best proof-paper (forming the original "India-proof" of former days), the elegance, cheapness and general use of their commonest stationary-materials are amongst the most satisfactory proofs of a true civilization. Chinese paper is made from bamboo, rice-straw, wheat-straw, cotton, hemp, the bark of the Ailanthus, Broussonetia and other trees, and the refuse of silk-cocoons. 火紙 (*Ho-chí*), is rice-straw paper used for sacrificial burnings. 皮紙 (*P'i-tsze*), is the mulberry-bark paper, which has been long used in the Hankow Mission Hospital as a substitute for lint and old rag. It comes from Wu-chang fu and Yun-yang fu in Hupeh. Wan-tsaí hien Fung-sin hien and Lin-chang hien, all in Kiangsi, make a paper called 表芯 (*Piau-sin*), used for packing. Liu-yăng hien in Hunan also supplies this article. 花箋 (*Hwa-tsien*) paper from Fuhkien, and Sinchang hien (Kiangsi) is a rough paper for packing up drugs in. 黃表 (*Hwang-piau*) paper, made in Kwang-sin fu (Kiangsi) is the same as the *Ho-chí*, used in burning for the dead. 大則 (*Ta-tseh*), 中則 (*Chung-tseh*), made in Kwang-sin fu, are used for account-books. 毛邊 (*Mau-pien*), and 連紙 (*Lien-chí*), are fine papers made in northern Fuhkien and in Yuen-shan hien (Kiangsi), and used for writing, printing and mounting pictures or scrolls. 攺連紙 (*Kai-lien-chí*), is a good, yellow, thin paper useful for wrapping up powders in dispensary-practice. 蠟箋 (*Lah-tsien*), is a waxed note-paper. Seven-lined and eight-lined paper, divided by perpendicular red lines, and stamped with curious coloured devices, are sold every where in great variety, at small cost. The ashes of paper are given as an astringent, and the paper of an old book, or letter, after cutting out the printed characters, held in such commendable veneration in China, is a remedy for barren women! Much interesting matter on paper is to be found in Mr. Drew's "Kiukiang Report of Custom's Revenue" for 1869, to which the author is much indebted.

**PAPER MULBERRY.**—楮 (*Ch'ü*), 穀桑 (*Kau-sang*), 構桑 (*Kau-sang*).—The Paper Mulberry tree or Broussonetia (Morus), papyrifera of botanists, is common in China and Japan. Its globular, red fruit is much eaten by children. The wood is used for making vessels of various kinds. The seeds (楮實子) are small, round achenia, of a bright red colour, and much broken up, as met with in the shops. They are mucilaginous to the taste, and are believed to be tonic and invigorating. Coarse cloth and much good paper (皮紙), are made from the liber of this large and valuable tree. The leaves and branches are lenitive and diuretic, and may be used to make a ptisan in gonorrhæa.

**PARAFFINE.**—石腦油 See *Bitumen* and *Naptha*.

**PARASITES.**—斛 (*Huh*).—These true parasitic plants, such as the Mistletoe, Dodder, &c., are not carefully distinguished from the epiphytes or lodgers as the Chinese call them. The word *Huh* is applied generally to epiphytic Orchids. The Cordyceps Sinensis is a parasite upon the Hepialus caterpillar, and like all these curious freaks of nature, is used medicinally in China. The mulberry-lice which are so injurious to the mulberry-plantations in China and Japan, are placed in the Materia Medica. See *Epiphyte*.

**PARDANTHUS CHINENSIS.**—射干 (*Shié-kan*).—The dark, irregular rhizomes of this and other Iridaceous plants are sold under this name. The rhizome is very hard, bristled with rootlets, and of a chrome-yellow in the interior. The taste is acrid in the fresh state, and the drug is understood by the Chinese to be deleterious. It is prescribed in the *Pen Ts‘au* as an expectorant, deobstruent, carminative and diuretic medicine, having some especial popularity in diseases of the throat.

**PARSNIP.**—胡 蘿 葡 (*Hu-lo-p‘u*).—This foreign vegetable is apparently included in the description of the Carrot in the *Pen Ts‘au*, though the account is not very clear.

**PASSERINA.**—甘 遂 (*Kan-sui*).—The tubercular, or nodulose, roots of this Thymelaceous plant are brought from Sui-teh-chau in Shensi, and from Kiangnan. The plant has an acrid and poisonous juice. The root is usually sold with the tubers separated. They have a reddish epidermis, partly removed, and internally are white, starchy and much worm-eaten as a rule. They are administered in anasarca, ascites, tympanitis, hernia, hydrocele and dysuria. They are applied to deaf ears and aching parts, to relieve pain.

**PASSERINA CHAMÆDAPHNE.**—芫 花 (*Yuen-hwa*).—The small, dried, downy flowers of this Daphnal plant are brought from Pehchihli, Hupeh and Kiangsi, and are infused in a spirit much drunk in Central China, as a sort of cordial, tonic and antifebrile tincture. The leaves are irritant, and with the flowers and root-bark are applied to buboes, &c. They are said to act on the uterus. They are mixed with salt, and used to colour preserved eggs of a reddish-brown colour.

**PASTILLES.**—蚊 煙 香 (*Wan-yen-hiang*).—These are long, limp torches of bamboo, covered with a composition of elm saw-dust, some fragrant substance, and a small quantity of sulphur, or orpiment. They are sold for one cash each, and are used to drive away mosquitoes, or bad smells, both very common in China. Hollow coils of touch-paper, filled with a similar powder, are called 蚊 煙 (*Wan-yen*), and are sold at two cash per yard of length. These burning pastilles are a most frequent cause of fire in Chinese houses.

**PAULOWNIA IMPERIALIS.**—桐 (*T‘ung*).—This identification of HOFFMAN and SCHULTES is probably correct. The tree is called also 白 桐 (*Peh-t‘ung*), and is said to be like the famous *Fu-sang* tree of the country of *Fu-sang*. Its timber is excellent, being much esteemed for making musical instruments. The large, cordate-ovate leaves are used as a wash for sores, and to strengthen the hair when turning grey. The bark is vermicidal and diuretic. The flowers mark the coming of the third month, appearing before the leaves, and are succeeded by large ovoid fruits.

**PEA.**—See *Pisum Arvense.*

**PEACH.**—桃 (*T‘au*), 仙 果 (*Sien-kwo*).—The Peach (Amygdalus Persica) might as well be called Chinese as Persian, for it has been long indigenous to this isolated country, and bears most plentifully, as the right half of the character (which means a million) would seem to indicate. The trees are often grafted, but the kernels of these are not officinal. The 油 桃 (*Yü-t‘au*), is the Nectarine. 餅 桃 (*Ping-t‘au*) and 盒 桃 (*Hoh-t‘au*) are names of the "flat peach," of excellent flavour and foreign origin. 金 桃 (*Kin-t‘au*) is a yellow fruited peach. Varieties from Persia, Kwanlun and elsewhere are named in great profusion. The Chinese have a vicious way of plucking these, and many other fruits, before they are ripe. A kind of vinegar was formerly made from the pulp of the fruit. Peaches are thought to suit lung-diseases. The kernels (桃 仁) are given in coughs, blood-diseases, rheumatism, amenorrhœa and worms. They resemble almond-pips in their action. Peach-flowers are put down as laxative, diuretic, sedative and vermifuge. The bark is given in jaundice, dropsy, hydrophobia dysmenorrhœa, asthma and many other diseases.

**PEACH-GUM.**—桃 膠 (*T'au-kiau*),—The gum flowing from incisions in the bark of the peach-tree was formerly a favourite sedative, alterative, astringent and demulcent remedy.

**PEAR.**—梨 (*Li*), 果 宗 (*Kwo-tsung*).—The pear has been long known in China, if it be not indigenous to the country. It was introduced into India from China, along with the peach, according to Mr. EITEL. 波 梨 (*Po-li*), 香 梨 (*Hiang-li*), 白 梨 (*Peh-li*) and 雪 梨 (*Siueh-li*) are northern varieties, brought from Shingking and Pehchihli. Many other kinds are known, but the actual Chinese pear is a woody and tasteless fruit. The character 棠 (*T'ang*) stands for the genus Pyrus, the character 梨 (*Li*) having been given to the fruit from the belief that it tended to cause, or to aggravate dysentery (利 or 痢 the sharp malady). Laxative, diuretic, cooling, anti-vinous, tussic and expectorant qualities are assigned to it. The flowers and bark are given in fever, cholera and dysentery.

**PEARLASH.** —鹼 砂 (*Kien-sha*).—This is a kind of home-made potash, used to raise bread, or as an alkaline ley to remove grease and dirt.

**PEARL-BARLEY.** —薏 苡 米 (*I'-i-mi*).—See *Job's tears* (*Coix lachrymalis*).

**PENNYROYAL.**—See *Mint.*

**PEONY.**—See *Pæonia.*

**PÆONIA ALBIFLORA.**—白 芍 藥 (*Peh-choh-yoh*).—The root of this Ranunculaceous plant is in great repute with Chinese doctors as a tonic, alterative, astringent and general remedy in diseases of females. It comes from Hwui-chau-fu in Nganhwui, and from Honan. It occurs in hard, heavy pieces, tapering, of the size of the thumb, or middle finger, and from four to six inches long. It is of a pinkish-white colour, and marked with scars and tubercles on the outside, and is white or brownish, and semi-translucent in the interior.

**PÆONIA MOUTAN.**—牡 丹 (*Mau-tan*).—This favourite flower of the Chinese gardeners, who make more than thirty varieties, has quite a literature of its own. By long care the plant has been rendered suffruticose. It is met with in the valley of the Yangtsze, and in Shensi and Honan. Yen-ngan-fu (Shensi), Tsau-chau-fu (Shantung) and Ho-nan-fu (Honan), supply the roughly-quilled bark of the root (丹 皮) which is largely prescribed in congestions, blood-diseases, menstrual disorders, hæmorrhages and in cases of vermes. It is met with in quills, three or four inches long, dark-brown on the outside, and of a pinkish colour on the inside, and on the broken surface. It has a warm flavour and but little smell.

**PÆONIA RUBRA.**—赤 芍 藥 (*Ch'ih-choh-yoh*), 刀 枝 (*Tiau-chi*), 川 芍 (*Ch'uen-choh*).—This drug is brought from Sech'uen and elsewhere. It is used as a carminative, deobstruent and alterative drug. It is in straight, pinkish-buff pieces, smaller than the other peony-roots, and furrowed longitudinally.

**PEPPER-CORNS.**—胡 椒 (*Hu-tsiau*).—Large quantities of the white and black varieties of pepper, which the Chinese regard as perfectly distinct kinds, are brought to Hankow, by way of Ningpo, for distribution to the other provinces of Central and Western China. It is imported from Malabar, Sumatra, Java, Borneo, and Malacca to a great extent. India formerly supplied the article, used by the Chinese as a warm stimulant, stomachic, carminative, derivative, antiperiodic and diaphoretic drug, and to some extent as a condiment at the tables of the wealthy. The common capsicum is too cheap to be replaced by the foreign article, but Mr. Bowra of the Imperial Customs reports that attempts have been made unsuccessfully, to raise the pepper-vine, which grows wild on the island of Hainan. The white pepper is preferred to the black, and is largely purchased at Ningpo.

**PEPPER, GROUND.**—胡椒麪 (*Hu-tsiau-mien*).—This article is never seen amongst the Chinese, unconnected with foreigners. Capsicum-pulp replaces both this and mustard as the condiment of the million.

**PEPPERMINT.**—See *Mint.*

**PEPSINE.**—See *Fowl's Gizzard.*

**PERGULARIA ODORATISSIMA.**—夜蘭香 (*Yé-lan-hiang*).—This fragrant Asclepiad plant is not known to have any medicinal use. It is remarkable as occurring in the same order as the fetid Carrion-plant. Some species of Pergularia are edible.

**PERSIMMON.**—柿 (*T'sze*), 柹 (*T'sze*).—These are the juicy, sweet, but occasionally austere, fruits of the Diospyros Kaki and other species of this Ebenaceous genus. See *Diospyros Kaki.*

**PETROLEUM.**—石腦油 (*Shih-nau-yú*), 硫磺油 (*Liu-hwang-yú*).—A full account of this and similar substances will be found under the articles of Bitumen and Naptha. At the present time Tseh-chau-fu in Shansi (south-west), yields a kind of petroleum, or rock-oil. In Kia-ting-fu (Sech'uen) there are oil or fire-wells, from five hundred to three thousand feet deep, which yield an inflammable gas (methane) and an oily, greenish, combustible petroleum-like liquid, containing paraffine. These wells (火井) have existed since the days of *Wu-tsung*, the ninth *Ming* emperor. The gas is said by Mr. Wylie to be used to evaporate the brine found in the same neighbourhood.

**PETUNTSZE.**—坯 (*Tun*), 白瓜子 (*Peh-tun-tsze*).—This siliceous, or quartzose, ingredient is used in making porcelain, and is not carefully distinguished by the Chinese from the Kaolin, or decomposed felspar, which is employed medicinally as an absorbent and astringent powder.

**PEWTER.**—錫 (*Sih*).—Tin and pewter are not distinguished with sufficient care by the Chinese and those who employ their nomenclature. The ores come from Yunnan, and from Kwei-yang-chau in Hunan, which latter place also yields what is probably an antimonial ore. The only medical point of interest is that cases of poisoning are known to occur from the use of pewter in making wine-vessels.

**PHARBITIS (CONVOLVULUS) NIL.**—牽牛子 (*K'ien-niu-tsze*).—The mixed triangular seeds of the black (黑丑), and white (白丑) seeded varieties of this plant are met with in Chinese drug-shops. They are used, sensibly enough for a wonder, as purgatives and diuretics in dropsy, in constipation and in cases of worms. They have a sweetish and subacrid taste.

They contain a brown and purgative resin, according to Dr. G. BIDIE. They are used as a substitute for jalap in the Indian Pharmacopœia, where direction will be found for preparing the Extract, Resinous Extract, Tincture and Compound Powder of *Kaladana*, the name by which the black seeds are known in India.

**PHASEOLUS ANGULATUS.**—綠豆 (*Luh-tau*).—This is an identification by TATARINOV. The *Pen Ts'au* includes one or two kinds of Phaseolus under this name. The vetch is called by the name *Luh-tau* in Hankow. China is remakably rich in many kinds of bean, some of which are very rich in oil. Other kinds have been imported for growth, as the names often indicate. Curry is very much improved by the addition of some of these Phaseoli. See *Vicia sativa.*

**PHRAGMITES.**—蘆 (*Lú*), 荻 (*Tih*), 葦 (*Wei*).—The banks, marshes and shoals, or islands, of the Yangtsze River are covered with the tall, tufted reeds which yield an annual growth to the people, who cut them down on the subsidence of the floods. These reed-beds yield a considerable revenue to the government, and form the fuel (蘆柴), for a large proportion of the people of Hupeh, Kiangsi, Nganhwui, Kiangnan, &c., who use them as well for building hovels, making mats and hurdles, and eat the young shoots as food. The shoots of this bamboo of the central provinces, are diuretic. The large long, leaves are reputed to be cooling and are often used to wrap up the three-cornered dumplings of glutinous rice eaten at the dragon-boat festival of the fifth month. The ashes of the stem are used as an escharotic. The root is believed to be cooling, stomachic and astringent. These reeds grow to the height of some twelve to eighteen feet, and are readily distinguished by their fistular stems, topped by the silky flag which marks the inflorescence.

**PHYTEUMA** (?)—黨參 (*Tang-san*).—The root of a Campanulaceous plant is sometimes met with bearing this name, usually given to a kind of Bastard Ginseng.

**PHYTOLACCA OCTANDRA.**—商陸 (*Shang-luh*).—This is an edible plant met with in gardens, and upon the roadsides in Hupeh, Shensi and Kiangsi. The eight stamens and eight carpels of this plant distinguish it from the Pocan Bush of the United States, which is a very acrid species of the same genus. It is emetic (the root), hydragogue, anti-arthritic and discutient. The flowers (葛花) are officinal in apoplexy.

**PIG.**—猪 (*Chü*).—See *Pork.*

**PIG'S TUBERS.**—猪苓 (*Chü-ling*).—These are tuberiform todies of an irregular size, and compared by the Chinese to pig's dung. They are covered with a thin, dark-brown, roughened cuticle, often worm-eaten, and are much lighter than the *Fuh-ling* (Pachyma) with which they have nothing in common but half the name. The interior is of a yellowish-brown colour, and very much resembles cork. They have no noticeable smell or taste. They are produced as an excrescence upon the trunk, or rootstock, of the Liquidambar (楓) tree, a genus of the order of Altingiaceæ. Other trees are said to produce it, or similar corky ridges. Most of the drug comes from the south, the trees in the north not producing this morbid outgrowth. It is recommended in fevers, fluxes and urinary disorders. The character *ling* is said to have formerly been written as that for spirit (靈), a term applied to the tree itself.

**PILLS OF ASSAFŒTIDA.**—阿 魏 丸 (*O'-wei-hwan*).—These pills, containing orpiment and dog-gall, are given in abdominal obstructions. Pills of assafœtida are said to be given to opium-smokers as a placebo. They answer better in the flatulence of dyspepsia so constantly complained of by the Chinese.

**PILLS OF ALOES AND IRON.**—通 經 丸 (*T'ung-king-hwan*).—The Chinese books contain prescriptions for emmenagogue pills, containing croton-oil, rhubarb and sulphate of iron. Pills containing myrrh and aloes, with or without iron, may be called by this same name. Menstrual disorders, attended with leucorrhæa, are very common in China.

**PILLS OF CALOMEL.**—輕 粉 丸 (*K'ing-fen-hwan*).—Calomel is largely used in Chinese medical practice as a 提 藥 (*T'i-yoh*), or "eliminating medicine."

**PILLS OF GINSENG.**—再 造 丸 (*Tsai-tsau-hwan*).—See *Ginseng*.

**PILLS OF MERCURY.**—水 銀 丸 (*Shwui-yin-hwan*).—Mercury was formerly used in the form of "blue pill," a conserve of dates being used to extingiush the mercury.

**PILLS OF OPIUM.**—生 泡 子 (*Sung-p'au-tsze*).—This is a name given to pills of "raw" opium, employed by suicidal persons, and by not a few fraudulent abstainers from opium-smoking. Good extract of opium for making opium -pills might be obtained from China for use at home.

**PINE.**—杉 (*San*), 沙 木 (*Sha-muh*).—This Coniferous tree (Cunninghamia Sinensis) grows in the southern, central and western provinces of China, and in Japan, from which latter place the Chinese at one time imported its timber. Its short, stiff pointed leaves, and its avoidance of the sea-coast, have been remarked by Mr. Sampson as distinguishing features of this fine tree. The timber is much valued for making coffins, flooring, furniture and house-frames, as it is less liable to the attacks of insects than the Pinus Sinensis (松 樹), but is not so suitable for piles as the latter, if the ground be permanently damp. The destruction of piles is almost certain if the tops of the piles show above ground, and are alternately exposed to air and water. Charcoal for making gunpowder is usually procured from the Cunninghamia wood. All parts of the tree are officinal as stimulant, tonic and sedative remedies.

**PINELLIA TUBERIFERA.**—See *Midsummer Root.*

**PINUS SUCCINIFER.**—松 石 (*Sung-shih*).—Chú-chau-fu in Chehkiang yields this fossil Conifer, which is associated in Chinese works with asbestus and amber.

**PISUM ARVENSE.**—豌 豆 (*Wan-tau*), 青 小 豆 *Ts'ing-siau-tau*).—This kind of pea would seem to have been introduced from the country of the Uigurs, during the T'ang time. The peas are eaten when fresh, but they boil very hard. The dried peas are speckled and purplish, and are ground into a fine yellowish meal (豌 豆 粉) which is much used in the streets of Hankow, where itinerant stall-keepers cook it up with rice-flour as a kind of gruel. Nutrient, astringent and diuretic properties are ascribed to this pea.

**PITCH.**—松 樹 膏 (*Sung-Shü-kau*).—Black Dammar and impure Elemi replace pitch and tar in China. See *Tar*.

**PLANTAGO MAJOR.**—車 前 (*Ch'é-ts'ien*).—This common "cart-track" plant was formerly eaten as a pot-herb. The small, reddish-black, mucilaginous seed (前 仁) are much used as a diuretic, pectoral, demulcent, tonic and anti-rheumatic dose.

**PLANTAIN.**—巴 蕉.—See *Banana.*

**PLASTER, BLISTERING.**—斑 貓 膏 藥 (*Pan-miau-kau-yoh*).—This plaster of the Mylabris Cichorii is not prepared in the same formal way as the Empl. Cantharidum of Europe. See *Bat's dung.*

**PLASTER OF CAMPHOR (BAROS).**—冰 片 膏 藥 (*P'ing-p'ien-kau-yoh*).—An expensive, warm plaster is in much repute amongst the Chinese, under this name.

**PLASTER OF ISINGLASS.**—魚 膠 片 (*Yu-kiau-p'ien*).—Strips of thin isinglass were the old adhesive plaster of Chinese surgical practice, but they are never met with at the present time. Seaweed gelatine has to a great extent replaced genuine isinglass in China.

**PLASTER, LEAD.**—蜜 陀 僧 膏 藥 (*Mih-to-sang-kau-yoh*).—This adhesive plaster was formerly prepared from litharge, as the name indicates, but is now seldom met with.

**PLASTER OF OPIUM.**—鴉 片 膏 藥 (*Ya-p'ien-kau-yoh*).—As the prepared opium is always at hand in China, this plaster is easily extemporised, and sometimes actually used by the natives who understand the use of opium in all its forms.

**PLASTER OF RESIN.**—松 香 膏 藥 (*Sung-hiang-kau-yoh*).—This plaster is much used in dressing sores, carbuncles and wounds in China, where plasters of all kinds replace the ointments of European practice.

**PLASTER, STICKING.**—合 口 膏 藥 (*Hoh-k'au-kau-yoh*).—All the filthy, black, nostral plasters, compounded of resin and wood-oil, with which the Chinese so love to close up foul and festering wounds and sores of every kind, may well be called sticking plasters. The common adhesive plaster of Europe goes well enough by this name, and is in great repute amongst the Chinese patients of Mission Hospitals, who look upon plasters as almost a part of their wearing-apparel. Adhesive plaster should be very carefully rolled up with a layer of tissue-paper, to prevent its matting together in hot weather.

**PLASTER, WHITE.**—白 膏 藥 (*Peh-kau-yoh*).—This Chinese "white plaster" is rather an ointment than a plaster, as is often the case in Chinese pharmacy. It is made from calomel, calamine, cosmetic powder, white and yellow wax, musk, Borneo camphor and lard. It is a very good sample of a Chinese plaster, and is applied to chronic ulcers and to bites.

**PLASTER OF PARIS.**—熟 石 膏 (*Shuh-shih-kau*).—This heated gypsum, or sulphate of lime, is used as a desiccating application to sores and herpetic eruptions.

**PLATINUM.**—白 金 (*Peh-kin*).—This name "white metal" has been some time in use in Anglo-Chinese works on chemistry, but is liable to some objection as it is already applied in the *Pen Ts'au* to silver.

**PLATYCODON GRANDIFLORUM.**—桔 梗 (*Kih-kang*), 桔 紅 (*Kih-hung*).—This plant is a kind of Bell-wort (Campanulaceæ) with red stems. It is said to have insecticidal properties, and is used to falsify Ginseng, like many other of the Campanulaceæ. The root is brought from Sech'uen, from Teh-ngan-fu in Hupeh, Hwai-king-fu in Honan, and from Ning-wu-fu in Shansi. It occurs in short, dark, brown pieces, much shrivelled and wrinkled, and sometimes moniliform, varying in size from that of a little finger to a writing-quill, or even smaller. It has little odour or flavour, but is used as a tonic, astringent, carminative, sedative, pectoral, stomachic, deobstruent, vermifuge and odontalgic remedy, so-called.

**PLUM.**—李 (*Li*), 嘉慶子 (*Kia-king-tsze*).—The genus Prunus is often expressed by the Chinese 梅 (*Mei*), applied to other fruits as well. 居陵迦 (*Kü-ling-kia*) is the Chinese equivalent of the Sanscrit name of the plum. Wild and very many cultivated kinds of plum of good size and flavour are met with in the central provinces. The word 奈 (*Nai*) also stands for some of the members of the genus Prunus. Plum-jam was formerly in vogue in China. The doubtfulness of the plum as a wholesome fruit is shared by old Chinese writers, who attribute several injurious, or even poisonous, qualities to the fruit. The kernels of the plum-stone are used in the same way as those of the apricot and almond. The root-bark was formerly used as an antifebrile remedy. Dr. Bretschneider gives an elm-leaved plum (楡葉梅) as the Prunus trichocarpa. 巴旦杏 (*Pa-tan-hang*) is the name of certain flat, amygdaloid kernels, brought from Shensi, and used in coughs. They formerly came from Asia.

**PLUMBAGO ZEYLANICA.**—雁來紅 (*Yen-lai-hung*).—The poisonous root of this acrid plant, which flowers in the ninth month, when "the wild geese come," is sudorific, sialagogue, anti-periodic and vesicatory. There is a white and a red variety in China, but no notice of the plant has been found in the medical works. The seeds are prescribed in rheumatism, neuralgia and as an eyewash. The people of India and Java use this and other species, perhaps common in China, as sudorifics and counter-irritants. A peculiar crystallizable principle, Plumbagin, resides in these plants, which judging from experience in Southern India, are worth a trial in leprosy.

**PLUMIERIA ACUMINATA.**—See *Egg-flower*.

**POISONS.**—毒藥 (*Tuh-yoh*), 癆壞人的藥 (*Lau-hwai-jin-tih-yoh*).—Officinal and orthodox medicines are called 官藥 (*Kwan-yoh*). Mineral substances are seldom met with in druggists' shops. Arsenious acid, orpiment, copperas, mercury, Borneo camphor, musk, nux vomica beans and gold leaf are substances, said to be taken by Chinese suicides, or used by poisoners. The most common and convenient poison is opium, a drug always at hand. Mandarins of high rank wear on their persons a small bead, filled with what is called peacock's blood. This they are said to take when they desire to destroy themselves suddenly. Wood-oil, vegetable tallow and the pods of acacia concinna are the ordinary remedies given by the Chinese in the cases of poisoning which are made out during life. To their credit they are not common in the interior of the country.

**POISON-OAK.**—鹽麩子 (*Yen-fu-tsze*).—This is the Rhus semi-alata, the tree upon which the Nut-galls (五倍子) are said by Hanbury to be produced. This and Rhus succedanea, the *Kakra-singhi* of India, furnish some of the Chinese varnish from their fruits, which contain reniform seeds, said by some to be eaten by children. The fruit is said to be sialagogue, expectorant, alterative and astringent. The name of *Yen* (salt) is given to the fruits because of the pollen of the flowers, which was formerly used as a condiment like salt in flavouring soups. The bark is prescribed in the *Pen Ts'au* in gin-drinker's jaundice, and as an astringent and anthelmintic.

**POLYGALA TENUIFOLIA.**—遠志 (*Yuen-chi*).—The root of this plant is brought from Sui-teh chau (Shensi) and Kʻai-fung fu (Honan) in contorted, quilled pieces, larger than a writing-quill, marked transversely, and of a brownish-yellow colour. It is sometimes quite tubular, the central vascular portion of the root having been removed. The taste is sweetish and somewhat acrid. This drug (遠志肉) is used in cynanche, cough, carbuncle and mammary abscess, and the leaves are given in spermatorrhæa. The drug may be used as a cheap substitute for senega.

**POLYGONUM AMPHIBIUM.**—天蓼 (*Tʻien-liau*).—This plant yields a root which the experience of French practitioners suggests as worthy of trial in those cases for which Sarza is prescribed. See *Smartweed.*

**POLYGONUM AVICULARE.**—萎蕤 (*Wei-jui*).—The dried root of this plant, which is the common knotgrass, confounded with Leguminous plants, and some preparation of the Bamboo. It is used as a demulcent, pectoral and tonic nostrum. See *Bamboo-rhizome* and *Polygonum hydropiper.*

**POLYGONUM BARBATUM**—毛蓼 (*Mau-liau*).—The seeds of this plant are used in India and in China, in spite of their acridity, in colic and choleraic affections. The leaves and stalks are used as a wash for callous and cancroid ulcers, strumous sores and indolent ulcers.

**POLYGONUM HYDROPIPER.**—萹蓄 (*Pʻien-chuh*).—The description in the *Pen Tsʻau* points rather to the P. aviculare, and a 水萹 appears to answer more to the common Water Dropwort, the name of the P. hydropiper. Its juice is used as a wash in itching affections of the skin, and the plant is prescribed as a diuretic, carminative and anthelmintic. The plant is used to make a kind of flux for use in operating on metals, and as an addition to cane-juice, in place of lime.

**POLYGONUM TINCTORUM.**—大青 (*Ta-tsʻing*).—The roundish leaves of this indigo-plant are prescribed in the *Pen Tsʻau* as a remedy, in petechial and other fevers.

**POLYGONUM.**—小青 *Siau-tsʻing*).—The leaves of some species of Polygonum, probably used in the south as a source of indigo, are employed internally and topically in much the same way as the P. barbatum.

**POLYPORUS ANTHELMINTICUS.**—竹蕈 (*Chuh-tan*).—This fungus growing upon the branches, joints and roots (according to some) of the bamboo, attains the size of a pullet's egg. It is of a brownish colour, and is poisonous, according to Chinese doctors, who use it as an anthelmintic and astringent drug. The Burmese call this fungus *Wa-mo* or *Than-mo.* See *Ph. of India, page* 258.

**POLYPORUS IGNIARIUS.**—芝 (*Chi*), 靈芝草 (*Ling-chi-tsʻau*).—Many sorts of fungi, exhibiting various colours at different stages of their growth or death, and having some degree of luminosity in the dark, are described in the *Pen Tsʻau* at great length. They are said to be magical in their effects in certain diseases, and to confer longevity. The name is often found on Chinese drug-shop signboards, and something is always concocted to answer to the demand for it. The sesamum is often called 芝麻 (*Chi-ma*).

**POMEGRANATE.**—安石榴 (*Ngan-shih-liu*).—The pomegranate, whose fruit is compared to a tumour, is not a native of China, Chang K'ien of the Han dynasty having brought it from *Ngan-shih kwoh* (Cabul). The character for *Ngan* is often dropped. The flowering shrub is much cultivated in China, and many varieties, including a large white-flowered kind, have been produced by Chinese gardeners. The red fruit, bursting open and revealing the numerous seeds, is compared to a grinning mouth of teeth. The fruit is largely eaten, the best coming from Yü-chau hien in Honan, and from Han-yang fu and T'ung-shan hien in Hupeh. The flowers are used with iron to make a hair-dye, and the root is given as a tonic, astringent anthelmintic and emmenagogue.

**POMEGRANATE-PEEL.**—石榴皮 (*Shih-liu-p'i*).—The dried pericarp of the Punica Granatum, or Pomegranate, is largely collected and use as an astringent, tonic, anti-rheumatic, anthelmintic remedy, and to make eye-washes. It has an excellent effect in the chronic dysentery and numerous fluxes to which the Chinese, male and female, are so generally subject to. It is also a useful remedy in that common disease, prolapse of the rectum.

**POPULUS SPINOSA**—淫羊藿 (*Yau-yang-hoh*).—This is a species of poplar growing in Han-chung fu (Shensi), I'-chau fu (Shantung), and Siang-yang fu (Hupeh). The cordate, acuminate, shining, netted leaves, with sharp, irregular teeth on the edge, and downy underneath, are used. along with the small branches, as a tonic, stimulant, aphrodisiac, anti-rheumatic and opthalmic remedy.

**POPULUS TREMULA.**—扶移 (*Fu-i*).—This is the Aspen, found in the valley of the Yangtsze, and other places. The bark is used as a tonic and febrifuge.

**POPPY, RED.**—紅罌粟 (*Hung-ying-suh*).—The *Pen Ts'au* barely mentions this plant as a kind of poppy confounded with the opium-poppy.

**POPPY, WHITE.**—罌子粟 (*Ying-tsze-suh*).—This name "jar-fruit millet" refers to the shape of the poppy capsule and its small millet-like seed, on the strength of which the poppy is found in the *Pen Ts'au* amongst the Cereals, just as its red sister is found in nature amongst the corn. The Papaver somniferum has long been grown in China, having come from Persia or Arabia, in all probability. The flower was used as an ornament, and the small seeds (御米) were made into a gruel, or crushed to produce an excellent oil. Several splendid varieties of the poppy are given in old lists of flowers. The gruel was given in dyspepsia and diarrhœa. The capsule (罌粟殼) was used in medicine before regularly set down in books as a sedative, anti-rheumatic, astringent, tussic and tonic remedy. The young herbage of the plant was formerly eaten as a pot-herb. The poppy was, and is still, planted in good soil at the ninth or tenth month of the year. It flowers in the third month and soon afterwards seeds. For a long time the capsule satisfied the necessities of the Chinese, but who taught them the use of the juice, and its manufacture into opium, is unknown. The cultivation of the poppy, which is now carried on largely in Yunnan and Sech'uen, and in all parts of the empire, is a punishable offence according to the Tartar Code, and Imperial edicts have been, and still are, issued against the growth of the plant. Since the autumn of 1868, native drug has formed a common article of commerce at Hankow, and its exportation has been allowed under provisional regulations, made by the highest provincial authorities. See *Opium.*

**PORK.**—猪 肉 (*Chü-jau*).—The pig has been domesticated in China for thousands of years. The Chinese and Siamese breeds are varieties of the so-called Sus Indica. The flesh of the ordinary black pig of Chinese towns in Central China, is by no means fine-flavoured, in spite of its praise by the natives of Hunan and Hupeh. The skin is very thick, and the amount of fat very considerable when the bad quality of the food given to the ill-favoured beast is duly borne in mind. This shows the "proofy" quality of the Chinese breed, recommending it to European breeders as an excellent cross for their own better-looking animals, too often very slow in fattening for the market. The body of the pig is usually blown up after killing, just as that of the calf is at home. This renders Chinese pork much lighter, and more digestible. The flesh of the sow (彘) is forbidden to the sick, and seems to be positively unwholesome, selling at a very low price in Hankow. Pork is said to produce phlegm, and is considered to be bad for those suffering from healing wounds, abscesses and strumous, or inflamed joints. The porcine disease called 米 心 (*Mi-sin*), is the "measle" of European pigs, the Trichina of veterinarians. The fusiform Trichina, contained in its cyst, is not unlike the "heart of rice," as the Chinese name signifies. It has been found to the extent of two per cent in the pigs of the Hankow market, but no case of trichiasis has been met with amongst the Chinese. Every part of the pig is assumed to have some special medicinal property. The liver and lungs are commonly employed to make soup for convalescents, who almost invariably make this terrible piece of extravagance the climax of their recovery. The blood of the pig is carefully collected, cooked and hawked about the streets of Hankow at nights as a favourite supper of the million. Pig's feet make a gelatinous broth, much used as a wash for irritable carbuncular and other sores. Nothing is ever wasted in China, the seat of all economy, except that of poor human life.

**PORTULACA OLERACEA.**—馬 齒 莧 (*Ma-chʻi-hien*).—HOFFMAN and SCHULTES give this as the identification of one of the Chinese plants called *Ma-chʻi-hien.* See *Amaranthus oleraceus.*

**PORT WINE.**—葡 萄 酒 (*Pʻu-tʻau-tsiu*).—Wine, sack and brandy have been made in China since the Tʻang and Mongol dynasties. Pʻing-yang-fu and Tai-yuen-fu in Shansi, one of the north-western provinces, were famous places for grape-wine, having probably derived the method from the Uigurs, and from Central Asia. In spite of the fusel-oil in the native wines, the Chinese dread the strong wines of Europe. The *Pen Tsʻau* attributes highly poisonous qualities to these wines when old, and recommends their cautious use as stimulants. Claret is commonly called 紅 酒 (*Hung-tsiu*), or "red wine." See *Brandy.*

**POTASH.**—石 鹼 (*Shih-kien*), 灰 鹼 (*Hwui-kien*).—A kind of pearlash, or wood-ash, is spoken of in the *Pen Tsʻau* as coming from Tsí-ning-chau, in the south-western part of the province of Shantung. It is there made by burning the Composite, Polygonaceous and other inland plants, and making the ash into a thick mass by the addition of meal of some kind. This is sold and used as an alkali for raising bread, cleaning clothes and other purposes for which such a substance might be required. There is some carbonate of potash in this salt, which is recommended in dyspepsia, and as an alterative or deobstruent remedy. Diseases of the eye were formerly treated with this crude alkali. It is now almost entirely replaced by the common native carbonate of soda, brought from Thibet and Mongolia, by way of Kalgan. Potash and Soda have never been carefully distinguished by Chinese writers.

**POTASH, NITRATE OF.**—消石. See *Saltpetre.*

**POTATO.**—洋薯 (*Yang-shü*), 土芋 (*T'u-yü*).—The *Pen Ts'au* speaks of a tuber under the latter name of *T'u-yü*, which is in all probability the common foreign potato, then not well known. The Dutch probably re-introduced this excellent vegetable, which is sometimes called 荷蘭薯 (*Ho-lan-shü*), or "Dutch yam." It is now grown in Sech'uen, Central and Southern China but is only consumed by foreigners. Roman Catholic priests, having traditional recollections of Ireland, have wisely introduced the potato as a crop, to go with the pig, and to save their converts from the consequences of dearth or drought.

**POULTICE OF BRAN.**—麥膚敷藥 (*Meh-fú-fú-yoh*).—Very cheap and efficient poultices may be made by mixing boiling decoction of Matricaria-flowers with wheaten bran, which contains enough of the flour to enable it to hold together. Adding a little linseed-meal greatly improves the poultice. Poultices are a Chinese application to some extent.

**POULTICE OF BREAD.**—麪包敷藥 (*Mien-pau-fu-yoh*).—This is seldom used in Chinese hospital-practice, from its expense. See *Bread.*

**POULTICE OF CARROTS.**—紅蘿蔔敷藥 *Hung-lo-p'eh-fu-yoh*).—This makes an excellent stimulating application to the very indolent and fetid sores to which the Chinese are so universally subject. The carrot is very plentiful in China, but is rather small.

**POULTICE OF CHARCOAL.**—板炭末敷藥 (*Pan-tan-moh-fu-yoh*).—This particular mode of using charcoal is not known to be used in China. See *Charcoal.*

**POULTICE OF LINSEED-MEAL.**—胡麻敷子 (*Hu-ma-fu-tsze*).—See *Linseed-meal.*

**POULTICE OF MUSTARD.**—芥末皮 (*Kai-moh-p'i*).—This usual plaster, or poultice, is not used by the Chinese, who use the capsicum as a rubefacient. They also chew ginger, and apply it as a poultice, or plaster, to painful parts.

**POUNCE.**—墨魚骨 (*Meh-yú-kuh*).—This, the powdered bones of the cuttle-fish, is a very common domestic remedy for stopping the flow of blood from wounds, or for use as a dusting-powder for the skin.

**POWDER OF CAPSICUM.**—胡椒麪 (*Hu-tsiau-mien*).—See *Cayenne Pepper.* This powder is very useful in the treatment of some forms of Chinese dyspepsia.

**POWDER OF CATECHU (COMPOUND).**—兒茶丹 (*Rh-ch'a-tan*).—Scarcely known to the Chinese.

**POWDER OF CHALK (COMPOUND).**—See *Powder of Cinnamon* (*Compound*).

**POWDER OF CINCHONA.**—金丹末 (*Kin-tan-moh*).— This powder is unknown to the Chinese, and the name is coined. See *Cinchona.*

**POWDER OF CINNAMON (COMPOUND).**—桂皮散 (*Kwei-p'i-san*).—This powder of chalk, cinnamon, cardamom-seeds, nutmeg, cloves and sugar, or of cinnamon, cardamom-seeds and ginger, makes an excellent placebo for persons giving up opium-smoking, who often suffer from diarrhœa, or spermatorrhœa. Cinnamon is something more than a mere spice.

**POWDER OF IPECACUANHA AND OPIUM.**—鴉片散 (*Ya-pʻien-san*).—This drug, the Dover's Powder of English pharmacy, has a most excellent effect on the Chinese constitution, and is invaluable in the treatment of diarrhœa and dysentery.

**POWDER OF JALAP (COMPOUND).**—水鼓散 (*Shwiu-kú-san*).—The true Jalap-root is not a native of China, but ascites is so common in Hupeh that this useful hydragogue may be well called "the powder for ascites," the meaning of the name here coined. See *Pharbitis Nil.*

**POWDER OF RHUBARB AND GINGER.**—大黃散 (*Ta-hwang-san*).—This powder makes an excellent dose for Chinese dyspeptics.

**POWDER, TONIC.**—補胃散 (*Pú-wei-san*).—Tonic and stomachic powders, containing a little rhubarb, calumba, dried carbonate of soda, and a small quantity of the powdered nux vomica, are a sample of the drugs in such great demand amongst the dyspeptic Chinese, a numerous class.

**PULVIS STYPTICUS.**—八寶丹 (*Pah-pau-tan*).—This is a secret remedy, supposed to contain "eight valuable panacea," in which lead always figures largely. All the common metals are supposed to enter into its composition, which varies with the compounder. It is used in cases of hæmorrhage, severe injury and syncope.

**PRECIPITATE, RED.**—See *Mercury, Red Oxide of.*

**PRECIPITATE, WHITE.**—See *Corrosive Sublimate.*

**PRIVET.**—See *Ligustrum lucidum*, and *Wax-tree.*

**PROSOPIS.**—猪牙皂莢 (*Chü-ya-tsau-kiah*).—These "boar-tusk" pods of a Leguminous tree growing in Shantung and Sechʻuen, are referred by TATARINOV to Gleditschia Sinensis, but are more probably those of a genus not far from Prosopis, as suggested by Hanbury. They are from two to four inches long, and from three-tenths to five-tenths of an inch broad, sickle-shaped, flattened transversely and the upper edge keeled. They are thick, indehiscent, and externally of a glazed, chocolate and even black colour. Internally they are filled with a yellow, spongy, villous substance, and seedless. The taste is very acrid. Their uses are much the same as those of the Gleditschia, which see.

**PRUNUS.**—See *Plum.*

**PRUSSIAN BLUE.**—洋靛 (*Yang-tien*).—This salt, a ferrocyanate of iron, is made by the Chinese at Canton, and various parts of China by Cantonese, who manufacture the yellow ferrocyanide of potassium from dry refuse animal matter, carbonate of potash and iron filings, which are heated in a closely covered vessel. The Cantonese keep it a great secret, but their article is the common, heavy, basic Prussian Blue, probably prepared by precipitating a mixture of ordinary alum, and sulphate of iron (copperas) with the ferrocyanate of potash. It is of a bright blue colour and much used in some places as a dye, along with indigo. The colour is not lasting although much more brilliant than that of the common indigo, the universal dye of the Chinese.

**PSORALEA CORYLIFOLIA.**—補骨脂 (*Pú-kuh-chi*), 破故紙 (*Pʻo-ku-chi*).—This small Leguminous plant is described as coming from Persia, and India, but is met with in the south and west of China. The flat, oval or slightly remiform, black, one-seeded legumes are about two or three lines long, and often retain the persistent, five-lobed calyx. They have an aromatic smell, and a bitter, aromatic flavour. They are used in spermatorrhœa and chronic visceral diseases.

**PTARMICA SIBIRICA.**—黃耆 (*Hwang-kʻi*), 黃茋 *Hwang-kʻi*).—Hoffman and Schultes have identified one of the two or three plants known by these two names as the Ptarmica Sibirica. The common plant is certainly the Sophora tomentosa. There is a Labiate plant, called 蓍草, or 芰草, brought from Yen-chau fu in Shantung, which may be the Ptarmica. It is used as a tonic in much the same cases as the Sophora tomentosa, which see.

**PTEROCARPUS FLAVUS.**—蘗木 (*Pʻih-muh*), 黃柏 (*Hwany-peh*).—The bark of this large Leguminous tree is sold in square, or rectangular pieces, from three to five inches long, rough on the outer surface, and smooth, or striated longitudinally, on the inner surface. The interior is of a deep yellow colour, and the taste is very bitter. It varies a good deal in thickness, that from Hupeh province being the thinnest. It is prescribed as a tonic, diuretic and anti-rheumatic. It is also used to dye silk of a yellow colour.

**PTEROCARPUS SANTOLINUS.**—赤檀 (*Chʻih-tan*), 紫檀 (*Tsz'e-tan*).—This Red Sandal Wood, used elsewhere as a colouring agent, is valued in China as a tonic, alterative, sedative and astringent remedy, increasing the circulation of congested parts, and thereby removing dropsical and other effusions. Like all red substances it is supposed to act specially on the blood, and was formerly much used as a vulnerary remedy. It contains tannin and some gallic acid, with a peculiar colouring matter called Santolin. Mr. Eitel ("Handbook of Ch. Bud.") gives *Tailaparni*, or *Rakta tchandana* as Sanscrit names of this wood. He also speaks of a kind of copper-brown sandal-wood under the Sanscrit name of *Gosircha tchandana*, which is rendered into Chinese as 牛首旃檀 (*Niu-shau-chin-tan*). This is only obscurely referred to in the *Pen Tsʻau*. Red Sandal-wood comes from Canton province where the tree is said to grow, as well as in Yunnan. This wood is extensively used to adulterate the Lign-Aloes wood.

**PUCHAK.**—See *Aucklandia costus.*

**PUMELO.**—柚 (*Yú*).—See *Shaddock.*

**PUMICE-STONE.**—浮石 (*Fau-shih*).—This substance is used by the Chinese in preparing leather and bowstrings. It is recommended in the *Pen Tsʻau* as a remedy in goitre, struma, tumours, hernia, coughs, hæmorrhages, urinary disorders, cutaneous and opthalmic diseases.

**PUPALIA GENICULATA.**—牛膝 (*Niu-sih*).—This is a cultivated species of Amarantaceæ, whose roots are knotted and compared by the Chinese to the "cow's knee," a name agreeing with the trivial Latin name. Species of the allied genera Achryanthes and Cyathula are sold under the same name. The root is of a dark brown, or yellowish, colour, twisted, knotted, irregular, light and open in structure, with fibrous rootlets attached to it. The interior is of a dirty-white colour, and the stuff has little flavour. 川牛夕 (*Chʻuen-niu-sih*), is a coarser variety brought from Sechʻuen. It will be observed that a character having the same sound is substituted for the proper character given above. This is a universal practice with wholesale Chinese druggists, who so long as they adhere to the *same tone*, as well as sound, never have any hesitation in changing the character at pleasure, using generally a shorter one. 懷牛膝 (*Hwai-niu-sih*), is a specimen of this drug, brought from Hwai-king fu in Honan, a great place for the cultivation of drugs. This occurs in straight, flexible pieces of the size of a small quill, wrinkled longitudinally, and of a brownish-yellow colour. The taste is bitterish, and somewhat acrid. This may be an Achryanthes. The *Pen Ts'au* speaks of a unsexual variety, and directs the staminiferous plant to be used. The shoots of all these plants are edible. The leaves are used to dilate the pupil of the eye. The root is much esteemed by the Chinese as a remedy in rheumatism, syphilitic pains in the bones, ague, fever, urinary, puerperal and cutaneous diseases. The drug has probably some good effect in rheumatism. In India diuretic and astringent properties are attributed to the Achryanthes aspera, which would appear from the description in the *Pen Ts'au* to be one of the plants used under this name in dysuria, lithiasis and hæmaturia. Some effect upon the uterus is attributed to it, as the drug is recommended in menorrhagia and retained placenta.

**PURSLANE.**—This is a name of the Portulaca oleracea, which see.

**PUTCHUK.**—See *Ancklandia costus.*

**PYRITES.**—See *Iron Pyrites.*

**PYRUS.**—See *Pear* and *Mountain Ash.*

**PYRUS CYDONIA.**—木瓜 (*Muh-kwa*), 木桃 (*Muh-t'au*).—This small tree is found in Persia, Nepal, the Himalayas and North India. The large sour fruit of this Quince tree is brought from Honan, Sech'uen, Kweichau and Nganhwui. The drug used is in the form of the dried, shrivelled, bisected, purplished-red halves of the fruit, deprived of the seeds, whose demulcent properties are overlooked by the Chinese, with their usual perversity. Every part of the plant is officinal as a sedative or astringent. The dried pericarp is prescribed as an arthritic, sedative, cordial, stomachic and astringent remedy. The ashes of the fruit are used to poison fish. Quince-seeds (*Bhi-dana* or *Bhi-ka-by*, Hind.) are highly valued as a demulcent, tonic, and restorative by the Mahommedans of the East, according to Dr. Waring. A very sour kind of fruit, brought from Siuen-ching-hien in Nganhwui, and also from Sech'uen is called 宣木瓜 (*Siuen-muh-kwa*). It was formerly used in the Imperial pharmaceutical establishment, which now forms, according to Dr. Dudgeon, a more important place than the *Tai-i-yuen*, or Imperial College of Physicians. The Carica Papaya, or Papaw, is apparently included under this description in the *Pen Ts'au.*

## Q

**QUARTZ, COLOURED.**—五色石英 W*u-sih-shih-ying*).—This name in the *Pen Ts'au* includes several sorts of fluor-spar, cairngorum, quartz and siliceous minerals. Large opaque, shining, white pieces of massive quartz (白石英), with smaller, regular, rhombohedral crystals, are brought from Tung-chau-fu in Shensi, from Tseh-chau-fu in Shansi, and from Shantung. The mineral is prescribed in the *Pen Ts'au* in lung-diseases, jaundice and rheumatism. It enters into the composition of a sort of Vinum Ferri, formerly used in spermatorrhœa, impotency and debility.

**QUASSIA.**—白 木 (*Peh-muh*).—This name, "white wood," is coined, as the drug is unknown to the Chinese pharmaciens. The chips make an excellent bitter menstruum.

**QUERCUS.**—See *Oak*.

**QUICKSILVER.**—See *Mercury*.

**QUINCE.**—See *Pyrus Cydonia*.

**QUININE.**—金 丹 絨 (*Kin-tan-jung*).—This name is coined, by adding the character for floss to those adopted for Cinchona. Another name in use is 金 鷄 納 霜 (*Kin-ki-nah-shwang*). The objection to this is the stupid transliteration, and the fact that the last character *shwang* means a sublimate in what may be called Chinese chemical language. See *Cinchona*.

**QUISQUALIS CHINENSIS.**—使 君 子 (*Sze-kiun-tsze*).—The fruits of this Combretaceous plant are named after a famous Chinese physician who introduced them more particularly into notice as a medicine. The fruits are about an inch, or one inch and a half long, oblong, pointed at both ends, with a slight obliquity, and sharply pentagonal. The pericarp is smooth, hard, thin between the ridges, of a dark brown or black colour, and enclosing an oily seed with two cotyledons, which should be of a yellow colour. The taste is by no means unpleasant. Fruits showing any sign of dehiscence, or at all worm-eaten, should be rejected. This drug originally came from Annam, but the Chinese drug-market is now amply supplied from Canton, Fuhkien, Sechʻuen and other provinces of the empire. Its great property is that of a safe and efficient vermifuge. Four or five seeds, roasted and eaten on the first morning of the month before taking any food, constitute the dose for Chinese children which seldom fails to expel worms. The Chinese seldom apply at Mission Hospitals for their children suffering from worms, which are very common amongst them. They assign two reasons for this, namely that they have such an excellent vermifuge in the Quisqualis-fruits, and they further say that worms are necessary for the digestion of food, especially in the case of voracious and omnivorous children! This shrub is the *Liane vermifuge* of the Mauritius, where the drug has caused spasms and some other ill effects when given in quantities of more than four or five of the fruits. In the Moluccas they have long enjoyed high repute as an anthelmintic, according to Dr. WARING's account in the Indian Pharmacopœia. He says that the scandent shrub is met with in Burmah, the Malayan Archipelago, and gardens in India, where it is called the Rangoon creeper. He recommends that four or five of these seeds be bruised and given with honey or jam, as an electuary, which suffices to expel the worms of children, especially lumbrici. This experience can be confirmed, and as the drug is cheap in China, it might be advantageously employed at home in place of those quack remedies for worms, of uncertain and unprofitable character. The best fruits come to Hankow from Meichau in Sechʻuen.

## R

**RADISH.**—紅 羅 蔔 (*Hung-lo-pʻeh*).—The large, long or round, fleshy, subacrid roots of Raphanus sativus, both red and white, are met with in abundance in all Chinese markets. They are extremely coarse in their flavour, but are eaten both raw and boiled. They make a capital garniture for other dishes. The third character *p'eh* is often written as 葡 (*p'u*).

**RAIN-WATER.**—雨 水 (*Yü-shwui*).—The rain-fall in Central China is very irregular and uncertain, and is becoming increasingly so, causing frequent, rapid and disastrous floods, in spite of the drainage afforded by the *T'ung-ting*, *Poyang* and other lakes, to say nothing of the great river Yangtsze. This is to be referred in great part to the destruction of the forests and trees of the country, which has taken place at the hands of the wicked rebels, and the worse soldiers of the imperial armies. From the absence of smoke and chemical works, rain-water in China is very pure. The rain of particular seasons of the year is believed by the Chinese to have special medicinal properties. That falling on the Dragon-boat Festival of the fifth day of the fifth month is called "holy water," and is said to be cooling, sedative and expectorant. Rain-water falling during the night is deemed to be anthelmintic. If rain-water be collected in spring, and be drunk out of one cup by man and wife, they are said to bear many children. Storm-water is directed in the *Pen Ts'au* to be used in the preparation of medicines for petechial fevers, and especially for infusing Justicia-root. Snow-water is set down as anthelmintic. Hail is believed to be deleterious.

**RAISINS.**—乾 葡 萄 (*Kan-p'u-t'au*).—Dried grapes have been long known in China. They were anciently used to make a kind of sack, or sweet wine. White Sultana raisins (白 葡 萄) are met with in Chinese shops, but are sold at a high price. See *Grapes.*

**RAPE SEED.**—See *Brassica Sinensis* and *Oil.*

**RASPBERRY.**—See *Rubus Idæus.*

**REALGAR.**—雄 黃 (*Hiung-hwang*), 黃 金 石 (*Hwang-kin-shih*), 明 雄 (*Ming-hiung*), 土 雄 (*T'u-hiung*).—This native mineral is met with in broken pieces, or larger clean, heavy, masses, of an orange-yellow colour, intermixed with patches of a bright vermilion-red colour, and having in places a metallic lustre. It is ochreous to the touch, staining the fingers with a reddish-yellow tint, hence its use as a pigment. It is brought from Mung-hwa ting (Yunnan), Hing-í fu (Kweichau), and Tsun-í fu (Kweichau). Kiai chau and Tun-hwang in Kansuh formerly yielded it. This disulphide of arsenic is said to be spermatic or masculine, and of the *Yang* principle, just as the yellow trisulphide (orpiment) is female, and of the germinal, or *Yin* principle. It is regarded as the germ of gold, and is used in soldering gold, hence one of its names, *Hwang-kin-shih.* It is fusible, and is distinguished from a darker variety used only externally to sores and eruptions, and called 熏 黃 (*Hiun-hwang*), from its not yielding a garlic odour when volatilized by heat, as the latter is said to do. Ornamental vessels and medicine-cups are made from this mineral. It is probably exported to India, where it is called *Mainsil.* It is said by Dr. WARING to be met with in Oude. The drug is seldom used at the present time internally, but anti-febrile, prophylactic, emetic, stomachic, expectorant, deobstruent, arthritic, anthelmintic, antidotal and escharotic properties are referred to it in the *Pen Ts'au* and other works. There is a curious direction in the *Pen Ts'au* for fumigating young women suffering from nymphomania, or some sort of eroticmania. Although this drug is not directed to be used in leprosy, as it is in India, it is directedto be applied to the eyebrows, when they are falling off from this cause, or from syphilis, a disease for which realgar is often employed externally at the present time. It is one of the drugs sometimes infused in small quantity in wine, and drunk off by all the members of families (in Hupeh) at midday, on the fifth day of the fifth month, as a prophylactic against the five animal poisons, and other morbid or malefic influences. See *Red Arsenic.*

**RED ARSENIC.**—紅信 (*Hung-sin*), 紅信石 (*Hung-sin-shih*).—A heavy, crystalline, native mineral, of a reddish-white, or mettled colour on the striated surface, goes by these names. It is of a brightish, shining-red colour on the scaly fracture, and consists of the red sulphuret of arsenic with some arsenious arid. It uses are similar to those of the other sulphurets. This drug is sometimes incorrectly named 紅礬 (*Hung-fan*).

**RED HÆMATITE.**—See *Iron*, or *Bloodstone.*

**RED LEAD.**—See *Minium.*

**RED PRECIPITATE.**—See *Precipitate.*

**RED SANDAL WOOD.**—See *Pterocarpus santolinus.*

**REHMANNIA CHINENSIS.**—地黃 (*Ti-hwang*), 生地黃 (*Sang-ti-hwang*), 熟地黃 (*Shuh-ti-hwang*), 毛地 *Mau-ti*), 毛原 (*Mau-yuen*).—The identification of this plant is due, in the main, to TATARINOV, who gives the names of R. Chinensis, R. glutinosa and Digitalis as the equivalents of the drugs called *Ti-hwang, Sang-ti-hwang* and *Shuh-ti-hwang* respectively. The roots of Rehmannia (Gesneraceæ) are brought from Kwang-pʻing fu (Pehchihli), Yuen-chau fu (Kiangsi), and very largely from Hwai-king fu in Honan. The crude drug is the *Sang-ti-hwang*, of no particular species. The prepared drug (*Shuh-ti-hwang*) is the raw root, which has been repeatedly steamed and sun-dried. It then presents the appearance of dark, soft, wrinkled, spindle-shaped masses, sometimes more or less flattened, about from two to five inches long, black in colour, moist on section, and having a sweetish taste. The root is largely prescribed as a cooling and purifying drug, acting directly upon the blood as an alterative and tonic. It is prescribed in many chronic visceral diseases, in general debility and in menorrhagia and leucorrhæa. See *Foxglove.*

**RESIN.**—松脂 (*Sung-chi*), 松香 (*Sung-hiang*).—This is the natural exudation of several species of Fir-trees, purified with great care by heating, straining and dropping into water. It is met with in irregular masses, of a pale orange, or sulphur-yellow colour, and more or less translucent, but powdery on the surface. It has a feeble terebinthinate odour and flavour, and resembles mastich, as suggested by HANBURY. It is used as a sedative, astringent and anthelmintic internally, but the great uses to which it is put is to make plasters, and to serve as glue in carpenter's work.

**RHAMNUS (ZIZYPHUS) SOPORIFERUS.**—酸棗仁.—See *Buckthorn.*

**RHINOCEROS HORN.**—犀角 (*Si-koh*).—The horns of the Rhinoceros (犀牛) are regularly imported from Siam, Cochin China, Sumatra, and India, beside the native supply. There must be some confusion between these true horns and those of some other animal, as horns called *Si-niu-koh* are said to come from Yu-yang chau in Sechʻuen, Tsun-i fu in Kweichau, Li-kiang fu in Yunnan, and from Si-ning fu in Kansuh. The black and pointed horns are thought to be the best. Tribute of these horns was commonly brought from countries of Asia to the Chinese court. The teeth of the extinct Rhinoceros of China, met with in the caves of Sechʻuen, are sold as dragons' teeth. Tonic, alterative and many other properties are attributed to these horns of the strong beast, the "sworded cow" of the Chinese. Cups are made of the horn.

**RHINOCEROS SKIN.**—犀皮 (*Si-pʻi*).—The hide of the rhinoceros is made into a jelly, a name of which is 海犀膏 (*Hai-si-kau*).

**RHUBARB.**—大黃 (*Ta-hwang*), 黃良 (*Hwang-liang*), 火參 (*Ho-san*).—Rhubarb is no doubt an indigenous drug in China, and enjoys many good names, in spite of its place in the *Pen Tsʻau* at the very head of poisonous plants. Chinese rhubarb is undoubtedly a more powerful drug in China, causing severe purging and some prostration. King-chau fu in Hupeh, Sui-teh chau in the northeastern part of Shensi, Lung-si hien in Kansuh, Mau chau and Ching-tu fu in Sechʻuen, yield this root the product of several undetermined species of Rheum, some of which are identical with the species yielding the Himalayan Rhubarb. Tangut, or Turfan and Thibet yield rhubarb of good quality. The Sechʻuen rhubarb is on the whole the best root, although exceedingly good roots come by way of, or from Shensi. Roots of Rheum Rhaponticum are sometimes brought to Hankow. The plants flower in the third or fourth month, and seed in the fifth month. There is a rhubarb-plant spoken of in the *Pen Tsʻau* as growing in Kiang-nan, which flowers much earlier and produces an inferior root, called 土大黃 (*Tʻu-ta-hwang*). This and another root called 山大黃 (*Shan-ta-hwang*), are really roots of dock-plants. The roots are dug up twice a year, namely in the second or third month, and in the eigth month of the year. The roots are cut into long tongue-like pieces, or sometimes into short pieces or sections of the root. They should be then placed on stones slightly heated in the fire, pierced through the thickest part and strung up to dry in the sun, or in a place artificially heated. Good rhubarb is of a reddish-yellow colour, variegated or mottled and firm in texture, and showing evidences of considerable deposits of raphides in its structure. The pieces should be dry, and not too light. When chewed the root should grate upon the teeth, have a bitter and sharpish rather then a smooth flavour, and colour the saliva with a deep yellow tinge. Boracic acid should not colour the external yellow surface of a dark brown. Rhubarb is given by Chinese physicians as a cooling, laxative, alterative, stomachic, astringent, emmenagogue, eliminative, deobstruent and diuretic remedy. The leaves are said to be insectifugal. The stalks are not eaten by the Chinese as in Europe.

**RHUS SUCCEDANEA.**—女貞 (*Nu-ching*).—This varnish-tree is said to yield Japan Wax. It is one of the trees said to harbour the Chinese wax-insect. In India it bears the Nut-galls, or *Wu-pei-tsze*, called in the Hindustani, *Kakra-singie*, the tree itself having the name of *Kakra-singhi*, according to Dr. WARING.

**RICE.**—米 (*Mi*), 稻 (*Tau*), 稌 (*Tú*), 糯 (*No*).—*Tau* is a general term for rice in the straw, which when hulled is called *Mi*. The *No*, or glutinous rice, the best of which is from Kiangsu, contains much dextrine, and is rounder in the grain. It is preferred for making congee, dumplings and wine, but is not so digestible as the common rice, called in the *Pen Tsʻau*

粳 米 (*Kang-mi*). A red and a white variety of the *No-mi* are made out in the *Pen Tsʻau.* Rice from Sechʻuen and Hunan supplies Hupeh, and excellent qualities of rice are raised in Kiangnan. Siamese rice appears in large quantities at Ningpo and the southern ports. Rice is the food of the greatest number of the human race. The Chinese inhabiting towns, and all except the natives of Honan, Shensi, Shansi and Shantung, who show a decided preference for wheat, consume rice to their full. The villagers of Hupeh often prefer to sell their rice, which needs something more tasty to accompany it, in order to purchase other necessities of life. The price of rice is becoming much more equal in the country than was formerly the case. Rice is faced with sulphate of lime, or levigated marble, to give it whiteness and increased weight. The Chinese almost invariably steam their rice, but they do not generally produce so beautiful a grain for the table as the Hindoos. Rice is the most easily digested of all cereals, but its bulk is objectionable, and gives a character to the Chinese and their diseases. It gives a peculiar paleness and looseness to their stools. Although this article of diet can be scarcely spoken of as a medicine, yet demulcent, stomachic, astringent and diuretic properties are set down with many others less intelligible. 稻 稈 (*Tau-kan*), or rice-straw is used to make paper, and the ashes are used as an alkaline remedy in urinary and febrile affections.

**RICE-FLOUR.**—米 粉 (*Mi-fen*).—The Chinese boil rice, (when it is called 飯 *Fan*), and then dry it in the sun, especially in the case of an excess after meals. These clear grains are then ground into a flour, which makes an excellent gruel. Dry-nursed children are fed with this. Ground rice makes an excellent poultice.

**RICE-SPROUTS.**—穀 芽 (*Kuh-ya*), 糵 米 (*Pʻih-mi*).—Rice undeprived of its husk is called *Kuh.* It is germinated and dried, the sprout being sometimes rejected, or is often retained. The sprouted grain is used as a peptic and tonic remedy, having much the same effect as the germinated barley, or malt.

**RICE-STARCH.**—米 漿 粉 (*Mi-tsiang-fen*).—This article is not sold as a powder in China, but is mixed up with powdered gypsum, and the product cut up into thin rectangular cakes and dried in the sun. For purposes of ordinary starching, the Chinese use the water in which rice has been boiled for some time, called 米 湯 (*Mi-tʻang*).

**RICE-PAPER PLANT.**—See *Aralia papyrifera.*

**RICINUS COMMUNIS.**—See *Castor-oil plant.*

**RIVER-WATER.**—流 水 (*Liu-shwui*).—River-water is used by the Chinese for making tea, in preference to lake-water or spring-water. The water of the Yangtsze and Han rivers, being full of alluvium, and very swift, the water is tolerably pure and soft after settling, or treatment with a very small quantity of alum. The water of the gorges of the Upper Yangtsze causes goitre.

**ROBINIA AMARA.**—苦 參 (*Kʻu-san*), 地 槐 (*Ti-hwai*).—The long, yellowish, and exceedingly bitter roots of this Leguminous plant are brought from Jü-ning-fu in Honan, and from Sü-chau-fu in the southern part of Sechʻuen province. This drug is given in jaundice, fevers, dysentery, leprosy, scrofula and many other important maladies. It is a very excellent tonic remedy, of more consequence than the ginseng, after which it is named.

**ROCK-CRYSTAL.**—水精 (*Shwui-tsing*), 水晶 (*Shwui-tsing*), 石英 (*Shih-ying*).—This siliceous mineral is in much request in China and Japan for making spectacles, ornaments and curiosities. Very good crystal is brought from Chang-chau-fu in Fuhkien, Wu-chang in Hupeh, and Kwang-sin-fu in Kiangsi. It is credited with several good effects in diseases of the eye, from its clearness and transparency. See *Tea-stone.*

**ROCK-OIL.**—石油 (*Shih-yú*).—See *Bitumen*, *Naptha* and *Petroleum.*

**ROSA CANINA.**—金櫻子 (*Kin-ying-tsze*).—This dog-rose is common in Kiangsi, Hupeh and other provinces. The fruits are large, and very rough to the taste. They were formerly made into a conserve and prescribed as a tonic and astringent preparation.

**ROSA SEMPERFLORENS,**—月季花 (*Yueh-ki-hwa*).—This is the Chinese monthly rose, a common scrambling shrub, bearing a regular profusion of red flowers, mostly barren. The flowers are said to encourage the breaking of strumous abscesses, when taken according to a very disgusting formula given in the *Pen Tsʻau.* The Chinese have, or had, very many kinds of Roses. 營實 (*Ying-shih*) is a general term for several sorts of Roses. 薔薇 (*Tsiang-wei*), or 墻蘼 (*Tsiang-mi*) are names of scrambling roses of various colours. Dr. WILLIAMS calls the latter the Cinnamon-rose. Their fruits and roots are officinal. 木香 (*Muh-hiang*) and 佛見笑 (*Fuh-kien-siau*) are names of a small and large kind of Rose. 玫瑰花 (*Mui-kwai-hwa*) is the name of a red rose. The roots of these Rose-trees were formerly in much request as vulnerary remedies in the days of Chinese archery. Mr. FORTUNE has remarked that some of the Roses in China are peculiar in having transparent dots on their leaves, resembling those of the Myrtles.

**ROSE-APPLE.**—閻浮樹 (*Chen-fau-shū*).—This is the tree known to botanists as producing the agreeable fruit, called Rose-apple, from the balsamic flavour of this Eugenia Jambos, a member of the Myrtaceæ, and not far removed from the Pimento, or Allspice. It is barely alluded to in the *Kwang-kiun-fang-pu.* Mr. EITEL gives *Djambu* as the Sanscrit name, and *Damba* the Singhalese name for this tree, which gives its name to the southernmost of the four great continents of the inhabited world, as described in Buddhist works.

**ROSE MALOES.**—蘇合油 (*Su-hoh-yú*), 蘇合香 (*Su-hoh-hiang*).—This semifluid resin, supposed by the Chinese to be the oil of a Labiate plant, is the product of the Liquidambar tree, and is identical with the Storax, or Liquid Storax, of commerce, as demonstrated by that pains-taking inquirer HANBURY. Dr. HANCE, writing in the "Chinese Notes and Queries" for February, 1869, says that the name Rose-maloes is probably the corruption of the word *Rasamala*, the name of a tree which yields a balsamic resin not unlike storax. See *Storax.*

**ROSE WATER.**—薔薇露 (*Ssiang-wei-lu*).—The *Pen Tsʻau* speaks of a perfume obtained from roses, as they conjecture, brought from *Nan-fan.* In the annals of the Sung dynasty, quoted by Dr. BRETSCHNEIDER in a series of articles of great interest in the "Chinese Notes and Queries" for 1870, references are made to a 薔薇水, brought to Canton and Fuhkien by Arabian traders. Oddly enough nothing is said of the Persian Attar of Roses in the *Pen Tsʻau*, although Persia is often mentioned in its pages as a source of drugs.

**ROUGE.**—胭脂 (*Yen-chi*).—The Chinese rouge is all made from vegetable substances. The Mirabilis Jalapa (sometimes called the Rouge-flower) and Safflower are used to make a paste, from which the colouring matter is extracted by repeatedly washing it with acidulated water. For toilet purposes the colouring-matter is spread upon squares of paper, or laid upon the surface of little saucers, the constant accompaniment of a Chinese lady's toilet. The lips and cheeks are adorned with this tint, the face at large is dusted with white powder, and the outline of the eyebrows and front of the wiry hair are fetched out, in many cases, with Chinese ink. The seals of some of the highest provincial officers are stamped with Safflower-rouge, to distinguish them from the ordinary vermilion-stamp of inferior officers. See *Safflower*.

**RUBIA MUNJISTA.**—茜草根 (*Si-ts'au-ken*).—This is the Rubia cordifolia of botanists, or the Munjeth, or Indian Madder, called *Mandjuchaka* (曼殊沙) in Sanscrit. The root has been long used in China as a dye for silk robes. It is sometimes called 地血 (*Ti-hiueh*), from some notion that it is the blood of man transformed. It is brought from King-chau fu in Hupeh, but must be common in China, from the number of names given to it, resulting from various spelling of the varying sound in different parts of the empire. Tonic, alterative, astringent, vulnerary and emmenagogue properties are ascribed to the root in the *Pen Ts'au.* The root is to some extent poisonous, according to both Chinese and Hindoo testimony. It causes delirium, dimness of sight, and some determination to the uterine system. 血藤 (*Hiueh-t'ang*), and 威靈仙 (*Wei-ling-sien*), are Rubiaceous plants closely allied to Madder. The latter is brought from Ngan-shun fu in Kweichau, and seems to have some very good effect in syphilitic and general rheumatism.

**RUBUS FRUTICOSUS.**—懸鉤子 (*Hiuen-tiau-tsze*).—This bramble-bush is met with in the valley of the Yangtsze, and the berries are gathered and eaten. Cooling, expectorant and anti-vinous properties are attributed to the fruit, and the juice is reputed to kill lice, not an uncommon pastime of the Chinese. The leaves and the root are astringent in their qualities.

**RUBUS IDÆUS.**—覆盆子 (*Fuh-pw'an-tsze*).—This wild raspberry yields a fruit, eaten by itself and as a preserve, but is very inferior to the cultivated kinds of European gardens. It grows in Kansuh, Shensi, Hunan and Hupeh. The plant is foreign to the old "middle kingdom" of China, as it is called *Si-kwoh-ts'au* in some works. The plant is used as an astringent and opthalmic remedy.

**RUMEX.**—See *Dock*.

**RYE.**—䅘 (*Lai*).—Dr. G. SCHLEGEL sets this name of *Lai*, which may be written 來, the old character for wheat (described as "coming" from heaven), as the name for Rye. From the Amoy pronunciation of 麦䅘 be deduces the word *blé*, identical with the French *blé* for Rye.

## S

**SACCHARUM OFFICINARUM.**—甘蔗 (*Kan-chi*).—See *Sugar*.

**SACCHARUM SPICATUM.**—茅根 (*Mau-ken*).—TATARINOV gives this identification in his brief list of the names of plants and other medicinal preparations. The name is popularly applied to the roots of grasses, or sedges.

**SAFFLOWER.**—紅藍花 (*Hung-lan-hwa*), 藥紅花 (*Yoh-hung-hwa*).—The dried red flowers of the Carthamus tinctorius, or Safflower, a Composite flower, are sold in large quantities at Hankow for use as a dye, or to make rouge. It comes from Honan and Sech'uen. It is often sold in small cakes of the compressed pink petals and yellow synantherous stamens. The seeds of the plant were first brought from Turkestan by the indefatigable CHANG K'IEN the Lucullus of China. There is some confusion, perhaps, between this plant and the Crocus, or Saffron. Stimulant, sedative, alterative, emmenagogue and discutient properties are referred to this drug. It is used to cause abortion. The shoots of the young plant are eaten in times of scarcity. The seeds are given as a lenitive or purgative in apoplexy and dropsy, An oil obtained from the seeds is used to grease those squeaking wheelbarrows, so familiar to all residents in China. It is also used in candle-making.

**SAFFRON.**—番紅花 (*Fan-hung-hwa*), 黃花 (*Hwang-hwa*), 西藏紅花 (*Si-tsang-hung-hwa*).—This Iridaceous plant of ancient renown, the Crocus sativus of LINNÆUS, is brought to the north of China from Thibet. The story of CHANG K'IEN is repeated for this plant, as well as for the Safflower. 撒法卽 (*Sah-fah-yin*), is a fortunate transliteration of perhaps the Persian name for Saffron given by Dr. BRETSCHNEIDER as *Ziaferan*. Another name given in the *Pen Ts'au* is 泊夫藍 (*Poh-fu-lan*). Saffron is given in incipient small-pox to drive out the eruption, in menstrual diseases, and in the delirium of fever. Other uses, as a stimulant, carminative and antispasmodic, are described under Safflower, the more common plant. Saffron may be distinguished from Safflower by means of the facts that the former is the dried thread-like styles of the plant, terminated by three long orange-brown stigmas, which are broadest at the summits; it has a much more aromatic smell than Safflower, and the latter invariably shows the presence of oil when crushed between folds of white blotting-paper. This drug is worth trial as a remedy for opium-smokers. The Mongols used it in cooking.

**SAGE.**—See *Salvia*.

**SAGITTARIA SINENSIS.**—慈菇 (*Ts'ze-ku*).—This Alismaceous plant is mentioned by TATARINOV, but is not so known here. Species of Amaryllis, or of Tulip, more generally take this or a similar name. The Sagittaria is cultivated in some parts of China, for the sake of its edible rhizome. Its herbage is acrid.

**SAGO.**—莎木麫 (*So-muh-mien*), 西穀米 (*Si-kuh-mi*).—Following Dr. BRETSCHNEIDER, the Chinese account in the *Pen Ts'au* seems undoubtedly to point to a Sago-tree, but of what kind this Cochin Chinese Sago-palm was, it is not easy to say. The Saguerus saccharifer (Arenga saccharifera) and the Cycas inermis appear from LOUREIRO's account to be met with in Cochin China. Cycas revoluta furnishes sago to the Japanese, according to THUNBERG. Sagus lævis and Sagus genuina, as well as Saguerus saccharifer, furnish large quantities of sago in the Moluccas. Singapore is the place of manufacture of much sago, according to Dr. WILLIAMS. From this latter place some is sent to China. 桄榔麫 (*Kwang-lang-mien*) is a sago, or meal produced from the pith of perhaps a Caryota Palm. The second name given above (*Si-kuh-mi*) is a barbarous invention of some lazy would-be Sinologue. The same nutritive and sustaining properties are attributed in the *Pen Tsʻau* as are commonly given to this insipid but wholesome starchy food.

**SAL AMMONIAC.**—磠砂 (*Nau-sha*), 䃧砂 (*Nung-sha*), 北庭砂 (*Peh-ting-sha*).—This saline substance, the chloride of ammonium of chemists, is brought from Lan-chau-fu and Ning-hia in Kansuh. The country of the *Tih*, or *Si-jung*, and Turfan formerly yielded it. The volcanic mountain of *Peh-ting* in Turfan is said to have yielded some ammoniacal salt from fissures in its sides, and hence the name *Peh-ting-sha*, more correctly given, perhaps, to volcanic ammonia. The Chinese name *Nau-sha* is very like the Hindustani names *Naushadar* or *Nausadar*, given to thick, fibrous, translucent cakes of this crude salt of ammonia, obtained in India from the unburnt extremity of brick-kilns in which the manure of camels, &c., is used as fuel. (Dr. WARING'S "Ph. of India," p. 309). KEFERSTEIN affirms that both carbonate and muriate of ammonia are found in China, but the dirty-white rough, deliquescent salt commonly sold under this name is nothing but sulphate of soda, or common salt. Nitre (soda-nitrate) and borax are also confounded with it. It is used as a flux or solder, or is said to be so employed. Whilst the salt is said to be deleterious, it is also said to be used in curing meat, or as a condiment. It is mainly used as a solvent for opacities of the cornea, for which the sulphate of soda acts almost as well. It acts as a sedative, resolvent, deobstruent, pectoral and mild escharotic, in Chinese estimation. They use it in veterinary practice. Some of the samples contain iron, and resemble the *Kala Nimuk* of India.

**SALT.**—食鹽 (*Shih-yen*).—This substance, the chloride of sodium of chemists, has been prepared for ages in China, in a variety of ways. In Kiai-chau (Shansi) salt water was formerly collected in large quantities in ponds or furrows in the soil, and on the blowing of a warm southerly wind, the salt crystallized in reddish grains. The salt-wells of Kien-wei-hien in Kia-ting-fu (Sechʻuen), and of Shun-king-fu and Kung-chau in the same province, are a large source of salt. These wells vary from five hundred to more than two thousand feet in depth, and are only a few inches in diameter. The brine is brought up by means of a bamboo-tube, which is alternately lowered and raised, the contents being retained by a strap at the lower end, until the tube reaches the top, when the strap is removed and the brine discharged into cisterns. The brine was formerly boiled in large tubs, but iron boilers are now used. The gas issuing from the fire-wells, or petroleum-springs is said to be sometimes fired to evaporate the brine. Mr. BOWRA reports that on the sea-coast of Chehkiang "large fields, from three to five hundred yards square, are levelled and surrounded with low earthen walls. Sea-water is pumped into the fields at high water, and left to the action of the sun." This operation is repeated, the salt scraped off and purified by solution, filtration and evaporation. Less salt is consumed in China than elsewhere, from the fact of the imperial monopoly of the article. And yet the article is produced in almost every province. Sechʻuen, Kansuh, Shensi, Shansi, Peh-chihli, Shingking in Manchuria, Shantung, Kiangsu, Chehkiang, Fuhkien, Canton, Yunnan and Kweichau supply more or less salt, the sale of which is in some cases curiously restricted by the government, which fails to suppress smuggling, which is carried on extensively. The province of Chehkiang ranks after Pehchihli and Shansi in the quantity of salt produced. Its salt can only be sold in the province, and in three districts of Nganhwui. The Hankow salt-market is ordinarily supplied with three sorts of salt, namely 北鹽 (*Peh-yen*), a white salt from the north; 淮鹽 (*Hwai-yen*), a clean salt, produced on the sea-coast of Kiangsu; and the 川鹽 (*Ch'uen-yen*) or 梁鹽 (*Liang-yen*), brought from Sech'uen. This latter salt, which is dark, granular and very strong, was not to be legally purchased in Hupeh, where the Hwai salt was used, until 1850, when by the destruction of all the salt-junks by a fire, all the salt was lost, and the Sech'uen salt had to be used for a time. Mr. HOBSON reports in his "Custom's Returns" for 1869, that Shi-nan-fu and I-chang-fu, and part of King-men-chau are supplied with Sech'uen salt which is sold in three qualities, not differing much in price. The Hwai-yen is clean, but not so fine or pure as that of Ningpo and Chehkiang generally. It is sometimes purified and sold in lumps, like foreign salt, called 鹽塊 (*Yen-kwai*). The retail-price of salt in Hankow is about three-pence per catty, a measure equal to one pound and a third. Salt is used in making up more dishes in China than in Europe, from the general want of flavour which is so remarkable in Chinese produce of all kinds. It is often put into tea for drinking. It is used medicinally as an emetic, stomachic, anthelmintic, cooling and antidotal remedy. It is applied hot over the sternum in pains of the chest, and over the belly in colic. It is used as a wash for the teeth, and is applied as a dressing for burns. It is believed to act injuriously upon the lungs. It is looked upon as a necessity of life, as the poor man's sauce, and has the popular reputation of strengthening the constitution.

**SALT, CRYSTALLIZED.**—戎鹽 (*Jung-yen*), 青鹽 (*Ts'ing-yen*), 光明鹽 (*Kwang-ming-yen*).—This is a kind of bay-salt, or crystallized salt, brought from Kansuh and Pehchihli. It is in the form of blackish, cubic crystals, having a saline state and all the properties of chloride of sodium, Some of the samples resemble the *Kala Nimuk*, or Black Salt of India, which contains a little sulphuret of iron, and has been found very serviceable in malarious enlargement of the spleen and liver. TATARINOV mentions that some samples of *Ts'ing-yen* have been found to be impure natron. It is possible that, as the *Pen Ts'au* speaks of samples of salt which do not deflagrate, other sodium-salts are sometimes included under these names which generally indicated salt, especially of foreign origin. Tangut and the Tungusic tribe furnished salt to the Chinese in olden times. Curiosities were made of rock-salt, and used as charms. A kind of crystallized salt called 鹽石 (*Yen-shih*), is brought from Shinchau in Pehchihli.

**SALTPETRE.**—消石 (*Siau-shih*), 芒消 (*Mang-siau*), 焰消 (*Yen-siau*), 火消 (*Ho-siau*), 地霜 (*Ti-shwang*).—These names are given to the natural efflorescence of the soil of that part of Mongolia annexed to Shansi province, and of places in Kansuh, and probably Sech'uen. It is collected, purified by solution, filtration and crystallization, and treated as a goverment-monopoly. This rough and impure salt, the nitrate of potash or nitre of books, resembles the *Shora* of the bazaars of India, where the salt occurs more plentifully than in China. In order to meet the immense demand for powder and fireworks amongst the Chinese, it is also produced artificially by collecting the nitrates and other salt which effloresce upon old walls, and upon surfaces near privies, and fusing them after solution and evaporation, so as to produce a rough cake of impure, yellowish nitrate, containing chloride of sodium and other impurities. These crude nitrates are further purified so as to produce striated six-sided crystals, having all the chemical properties of nitrate of potash. All the samples examined have given proof of the presence of sodium. There is much confusion between this salt of potash and 朴消 (*Pʻoh-siau*), the sulphate of soda, which crystallizes in oblique prismatic crystals, called 馬牙消 (*Ma-ya-siau*), 芒消 (*Mang-siau*). The crystals of saltpetre are finer, and belong to the right prismatic system. These names *Pʻoh-siau*, *Mang-siau* and *Ma-ya-siau* properly belong to the soda-salt, which see. Certain felspathic rocks, of which 石脾 (*Shih-pi*) is perhaps a sample, are said to yield a kind of saltpetre. The name *Siau-shih* given to saltpetre refers to its powder of acting as a flux for minerals. The radical character for stone is used, pedantically, in recent dictionaries as a novel substitute for the water-radical, the proper mode of writing the character. Saltpetre was formerly much used in medicine, but the sulphate of soda has now replaced it, the former being contraband, and not obtainable without going through certain formalities. A large and profitable illicit trade is carried on in the sale of saltpetre. Foreign saltpetre, called 洋消 (*Yang-siau*), is supplied to China from the Straits, and from India, for the Chinese government, which jealously guards the sale. The *Pen Tsʻau* sensibly recommends saltpetre in precisely the same diseases as it is prescribed for elsewhere. It is used as a wash for the treatment of sore eyes and opacities of the cornea, in which it acts favourably.

**SALVIA MULTIORHIZA.**—丹參 (*Tan-san*).—This Labiate plant, a kind of Sage, is grown in Shensi, Shansi and Shantung. The root is sold in short, shrivelled pieces of a bright brick-red colour, sometimes branching or twisted, and generally bristling with radicles. The interior is soft, and the taste of the whole is sweetish, somewhat resembling that of liquorice. This root is one of the "five quintessences" (五參), which are assumed by the Chinese to correspond to the five colours and the five larger viscera of the human body. This red plant is believed to be related to the heart and the red blood. It is credited with alterative, antispasmodic, arthritic, tonic, sedative, astringent and vulnerary properties.

**SALVIA PLEBEIA.**—荆芥 (*King-kai*).—This and other species of Sage are favourite remedies with the Chinese in catarrh, dysentery and in the hatching of the exanthemata.

**SANDAL-WOOD.**—白旃檀 (*Peh-chen-tan*), 檀香 (*Tan-hiang*), 眞檀 (*Chin-tan*).—These names of the wood of the tree called Santalum album, more or less represent in sound or sense the Hindustani word *Chandan* for Sandal-wood in general. Mr. EITEL gives *Sarpahridaya Tchandana* as the Sanscrit name, and *Tsandan* as the Thibetan version of this same word. Cambodia, Java, Borneo, Siam, Sumatra and other countries are said to have furnished this fragrant wood to China during the *Ming* dynasty. The tree is said to resemble the Lichi in the shape of its leaves. The tree is met with in Yunnan and Canton provinces, and a similar tree grows in other parts of China, but lacks the scent. The tree grows under the protection of the British Goverument in the Mysore country of India, reaching to the height of some twenty-five feet in some cases. The trees are cut down at the end of some twenty years and the wood chopped into billets for sale. The roots and heart-wood yield a fine yellow clear oil, which is an excellent remedy in gonorrhœa. Timur Island, the South Sea Islands, and other islands in the Indian and Pacific Oceans yield the wood for China, where it is used for incense, and carved into fancy articles. Stimulant, carminative, stomachic and sedative properties are referred to the sandal-wood in both China and India. It is also applied in the form of a coarse powder to aching parts.

**SANDARAC.**—芸香 (*Yun-hiang*).—This is evidently, from Chinese descriptions, the resin of Callitris qudrivalvis or some other Coniferous tree. The drug is not procurable in Hankow, but is somewhat whiter than mastich, and is used in much the same way as the other resins, as a stimulant, sedative and deodorizant. It is often put into clothes-trunks to keep away moths. There is a *Gunda Birosa* in the Indian pharmacy resembling this drug.

**SAP-GREEN.**—緑膠 (*Luh-kiau*), 緑膏 (*Luh-kau*).—This beautiful and permanent dye-stuff is the product, in great part, of the bark of the Rhamnus infectorius. It is made in Shantung, Hupeh and Chehkiang. It has the purgative properties of the buckthorn, in the crude state, and makes excellent marking-ink, when mixed with lunar caustic. Lime is present in the substance, as it is added to neutralize the acetic acid which is apt to form in this as well as in the well-known Syrup of Buckthorn. The *Luh-kiau* of Hankow is an expensive article, being sold in thin, dry, blueish scales, which when rubbed up produce a blueish-green pigment, used to colour shark-skin for covering spectacle-cases, &c.

**SAPPAN-WOOD.**—蘇方木 (*Su-fang-muh*).—The red wood of the Cæsalpinia Sappan, a Leguminous tree growing in Sumbawa, (after which it is named), Siam, Malaysia and Madras, is imported into China for extensive use as a dye, or staining preparation. An inferior wood, called 洋木 (*Yang-muh*), is much lighter. The wood contains much gallic and tannic acids, and is an excellent substitute for logwood, although much weaker. It is inserted in the Bengal Pharmacopæia. An extract may be made from it. The Chinese set it down as astringent, alterative, sedative and vulnerary. Anything red is counted favourable, and akin to the blood. The common name is *Su-muh*.

**SARSAPARILLA.**—See *Smilax Chinensis*.

**SAXIFRAGE.**—石胡萎 (*Shih-hu-wei*), 鵝不食草 (*Ngo-puh-shih-ts'au*).—This acrid plant has small yellow flowers, and grows near water. It is recommended in all diseases of the senses and great orifices of the body. It appears to act as an emetic and diaphoretic, and was an old remedy in ague, and in diseases of the eye.

**SCIRPUS.**—蓴 (*Shun*), 馬蹄草 (*Ma-t'i-ts'au*).—This is a kind of edible water-plant, set down in the *Pen Ts'au* as a refrigerant remedy, as a matter of course.

**SCIRPUS CAPSULARIS.**—燈心草 (*Tang-sin-ts'au*).—This sedge is grown in Kiangnan and Shensi, for making mats and lamp-wicks. The stalks are steamed, and the cuticle peeled off, leaving the central white pith, which is used to keep fistulous sores open, so as to make them heal up from the bottom. It is much used to prepare a ptisan, or menstruum for other drugs. It is said to be diuretic, lithontriptic, pectoral, lenitive, sedative, derivative and discutient. The consumption of this plant for making lamp-wicks is enormous. The Chinese watch the growth of the flower-like snuff of lamps and candles, and draw ominous conclusions from the appearances. The ashes are a favourite dose for children crying at night. The appearance of this sedge has given rise, probably, to its common name, the "tiger's beard."

**SCIRPUS TUBEROSUS.**—See *Eleocharis tuberosus.*

**SCORPION.**—全蝎 (*Tsʻiuen-hieh*).—This lobster-shaped arachnid is said not to have existed in the valley of the Yangtsze, or at least not on the southern side of the river, until the Mongolian dynasty, when an officer conveyed them thither in a bamboo-tube. Since then they are said to have gone everywhere. They are collected for medicinal purposes in Tai-ngan fu (Shantung) and in Kʻai-fung fu (Honan), and brought to Hupeh, where they are happily uncommon. They vary from one to two inches in length, some having longer, and some shorter, tails in proportion to their length. A small nummular, poisonous variety is spoken of as giving a fatal bite. The tail of six joints ends in a sharp, bent sting, which inflicts a paniful wound, over which the Chinese make the sign of the character for the number ten, with the mud of gutters or wells. This character is identical with that of the Christian cross. The insect is dried by heat, the antennæ being sometimes removed. It is an ingredient in the celebrated tincture called 馮了性酒 (*Fung-liau-sing-tsiu*), which is used as a diaphoretic or derivative medicine in all sorts of serious diseases.

**SCORZONERA.**—麥門冬 (*Meh-men-tung*).—A species of this Composite plant, the Viper's Grass of popular works, is sometimes included under this name of *Meh-men-tung*, which properly belongs to Ophiopogon. The root is eaten as a vegetable, and is a popular remedy in much the same cases as the Ophiopogon.

**SCUTELLARIA VISCIDULA.**—黄芩 (*Hwang-kʻin*).—This Labiate plant is the common Chinese Scull-cap, met with all over China. The light, spongy, yellowish roots are slightly bitter and mucilaginous. They are credited with cooling, antifebrile, demulcent, expectorant, and antilithic qualities. The seeds are also officinal.

**SCYTHIAN LAMB.**—狗脊 (*Kau-tsih*).—The curious tufts of the Fern called Aspidium baromez, simulate the appearance of an animal. The Chinese name indicates their notion of its resemblance to one of those many poor dogs they always have with them. This plant is sometimes called Tartarian Lamb, and is believed to act as a tonic, and to influence the reno-spermatic functions.

**SEA-DOG.**—海狗 (*Hai-kau*).—This is a Chinese name for the Beaver, of which some account is given in the *Pen Tsʻau.* The Castor is called 海狗腎 (*Hai-kau-shin*), or "the kidney of the sea-dog." This often turns out to be the dissected kidneys of some old dog, prepared to meet the demand for something nasty.

**SEAWEED.**—See *Agar-Agar, Isinglass* and *Laminaria.*

**SEDUM ACRE.**—佛甲草 (*Fuh-kiah-tsʻau*).—This pretty plant is the Stone-crop of Europe, called by the Chinese "Buddha's nails." Its juice, or the bruised herbage of the plant itself, is a popular application to burns and scalds.

**SEED-PEARLS.**—洋珠 (*Yang-chu*).—Small pearls are brought in large quantities from Bombay, and from the fishery at the Arrow Islands, east of New Guinea. They are said by

Dr. Williams to be partly used for medicinal purposes. They are not known in Hankow drug-shops to any extent.

**SELENITE.**—玄精石 (*Hiuen-tsing-shih*).—Small hexagonal, or lenticular, transparent or brownish crystals of this substance (sulphate of lime) are figured in the *Pen Tsʻau*. It comes from Kiai chau in Shansi, and from Tʻung chau in Pehchihli, as well as from Tai chau in Kiangsu. It is appariently associated with salt. It is prescribed as a cooling, astringent, anti-rheumatic and tonic remedy, and is used as a dust for sprinkling upon sore eyes. Selenite, or gypsum, is used to adulterate calomel. See *Hartal.*

**SENNA-LEAVES.**—大槐葉 (*Ta-hwai-yeh*).—The true Senna is not known to exist in China, but the large elliptico-lanceolate leaves of the Sophora (Cassia) Japonica have been found in Hankow to answer the purposes of Alexandrian or Indian Senna. They are greyish on the under surface, and being larger than the true Senna, the character indicating this peculiarity has been added to distinguish it from the Sophora, which see.

**SEPIA-INK.**—烏賊墨 (*Wu-tsʻih-meh*).—The small bag of inky fluid situated near the liver of the cuttle-fish, is understood by the Chinese to be its gall. They say it cannot be used as ink, for it fades in a few years. It is rubbed up with vinegar and given in angina pectoris. See *Cuttle-fish.*

**SERPENT'S BEZOAR.**—蛇黃 (*Shie-hwang*).—Pisiform clay iron ore, or nodular iron pyrites, have been fancifully assumed to be the bezoar of snakes, which they vomit up during their hybernation. They vary from the size of a hen's egg to that of bullets or shot. They are rufous-yellow on the outside from oxidation, and ferruginous or metallic on the fractured surface. Pʻing-nan hien in Kwangsi, Kwang-sin fu in Kiangsi, and Shau-hing fu in Chehkiang yield this mineral, which is probably identical with the 蛇含石 (*Shie-han-shih*), of Hanbury's "Notes." It was used in much the same way as the other ferruginous minerals. This name of *Shié-hwang* is sometimes given to gamboge.

**SESAMUM INDICUM.**—巨勝子 (*Kü-shing-tsze*), 芝麻 (*Chi-ma*).—This plant is extensively cultivated in Central China for the sake of its oily seeds, which are much used in Chinese confectionary. Although grown in China at an early period, it was introduced perhaps by Chang Kʻien into Shensi, along with species of Cannabis, and hence called *Hu-ma.* The fruits are dark-brown or black, four-cornered capsules, two-valved, and about a quarter of an inch long. The taste is sweet and aromatic. They are used as cooling, emollient, pectoral, laxative and uterine remedies. Two sorts of seeds, the white and the black, are sold in Hankow. Sesamum-seeds are largely sent from Honan. The leaves are used in India as demulcent and emollient remedies, and the seeds are reputed to be emmenagogue. See *Oil of Sesamum.*

**SETARIA.**—粱 (*Liang*).—Considerable difficulty is found in determining the kinds of millet grown in China, and their correct scientific and vernacular names. The 高粱 (*Kau-liang*), is the Barbadoes Millet, but is not a Setaria, but a Holcus, or Sorghum. Dr. Bretschneider reports that a small yellow grain largely cultivated and consumed in Northern China, is called 粱 (*Liang*), or 小米 (*Siau-mi*), and is in his opinion the Setaria Italica. The 稷 (*Tsih*), or 粢 (*Tsze*), which gives its name to the Chinese Ceres, is a very ancient food of the Chinese, and not far removed from the Panicum miliaceum, or Panicled millet, the *Warree* of India. The *Pen Ts‘au* says that the grain is less glutinous than the 黍 (*Shu*), a small round grain, of which there are described the reddish, the white, the yellow and the dark varieties. This is the Panicum miliaceum of botanists, and is used as a food, as well as to make corn-brandy, or whiskey. It is considered to benefit the lungs especially. It makes a very excellent flour, much whiter than that of the *Tsih* grain. The Setaria glauca is largely grown in the higher lands of Hupeh, where it is called 粟 (*Suh*), a name properly belonging to the maize, a foreign grain, now largely grown in China. (See *Chinese Recorder*, *Dec.* 1870).

**SHADDOCK.**—柚 (*Hiu*, or *Yü*).—This large, thick-skinned, yellow, fragrant fruit, the Citrus decumana of Risso, is usually called the Pumelo, or Pompelmoose. It has been known from the days of the Great Yü, who mentions it in his Tribute-roll. The flowers of the tree which flourishes in the south of China, more especially near Amoy, are very fragrant, and the taste when stripped of its thick, spongy rind is exquisite. Much pains is taken in grafting the tree upon the other species of Citrus, so that considerable improvement and change have taken place in the character of the fruit. The peel (柚 皮) is very bitter, but aromatic. It makes an excellent stomachic if enough of it be used. From the bulk of the peel it is difficult to make the tincture very strong. The Chinese use it in coughs and dyspepsia.

**SHELLS, FOSSIL.**—石 燕 (*Shih-yen*).—These "stone swallows" are found in parts of Hunan, in Kwei-lin-fu in Kwangsi, and in the island of Hainan. They are from three-quarters to one inch and a half long, and marked with flutings which show them to be fossil-shells. Mr. T. DAVIDSON and M. DE KONINCK have found in a collection of these fossils, at least ten Devonian species, namely three of Spirifer, two of Rhynchonella, one of Productus, one Crania, one Cornulites, one Spirorbis and one of Aulopora. Most of these have also been found at Ferques in France. These shells are recommended in the *Pen Ts‘au* in urinary disorders, and as an application, in the form of a powder, to opacities of the cornea. They are said to increase the pains of parturient women, when placed in their hands. There is some obscure reference in the *Pen Ts‘au* to birds petrified in stalactitic caves.

**SHEPHERD'S PURSE.**—薺 菜 (*Ts‘ai-ts‘ai*), 地 米 菜 (*Ti-mi-ts‘ai*).—This common Cruciferous weed, the Capsella Bursa Pastoris of formal works, is collected by the poor people in China and largely eaten as food. The root is an ophthalmic remedy.

**SHERRY WINE.**—白 酒 *Peh-tsiu*).—A common name for a common drink in foreign houses in the East, not altogether disliked by Cantonese servants.

**SHOE-FLOWER.**—See *Hibiscus Rosa Sinensis.*

**SIDA TILLÆFOLIA.**—青 麻 (*Ts‘ing-ma*).—This is said by BURNETT to be the common hemp-plant of North China. The root is described by the same author as a sudorific. This name is sometimes applied to the fibre of the Böhmeria.

**SIDEROXYLON CANTONIENSE.**—山 欖 樹 (*Shan-kan-shü*).—This Cornel tree is credited with the tonic and astringent qualities which belong to the order. It is unknown here.

**SIEGESBECKIA ORIENTALIS.**—豨 薟 (*Hi-kien*), 狗 膏 (*Kau-kau*).—This strong-smelling composite plant is named after the pig and the dog. The identification is from

Tatarinov. The plant grows in Sech'uen and Honan, and seems to have emetic properties. It seems to have some good effect in ague and rheumatism. It was an old remedy for wounds, carbuncles and swellings of all kinds.

**SILENE.**—王不留行 (*Wang-puh-liu-hing*).—This Caryophyllaceous plant is called by a name which expresses the slippery, demulcent properties of the plant, dependent upon the unctuous properties of the saponine contained in it. The dark, reddish, roundish seeds resemble turnip-seeds, and with the shoots of the plant are said to be vulnerary, styptic, diuretic, galactagogue, discutient and solvent. They are a common remedy taken by soldiers after injuries.

**SILVER.**—銀 (*Yin*), 白金 (*Peh-kin*).—Silver is obtained from Lien-chau, Shau-chau-fu, Chau-chau-fu, Shau-king-fu and Kau-chau-fu (Kwangtung); the island of Hainan; from Kwei-lin-fu, Liu-chau-fu, King-yuen-fu and Sin-chau-fu (Kwangsi); from Wu-ting-chau (Yunnan); Chang-teh-fu and Ho-nan-fu (Honan); Si-ngan-fu (Shensi); and from Kung-chang-fu in Kansuh. Much silver was brought formerly from Tonquin and Annam in exchange for zinc. Silver is associated with lead in various places. The silver from Corea, Persia and Cambodia, is spoken of in the *Pen Ts'au*. Silver is generally pure as met with in the form of the ingots, which under the name of *Sycee* form the currency of the country. Silver vessels are used to cook ginseng in, and as a test for the purity, or otherwise, of any suspicious article of diet or drink. Silver is said by Li Shi-chin to act as a sedative and astringent on the uterine organs.

**SILVER-AMALGAM.**—銀膏. See *Amalgam.*

**SILVER-ORE.**—錫悋脂 (*Sih-lun-chi*).—This is said to be the ore of silver, brought from Persia. It was used to make an amalgam which was given in infantile epilepsy.

**SILVER, SULPHURET OF.**—烏銀 (*Wu-yin*).—This preparation of silver was formerly used as a tonic nostrum. Cups of silver darkened by exposure to the fumes of sulphur and otherwise treated, were supposed to impart special properties to medicines taken out of them. Medicated cups of realgar, rhinoceros-horn and melted sulphur are used to drink wine out of as a remedy.

**SILVER, NITRATE OF.**—See *Lunar Caustic.*

**SINAPIS ALBA.**—白芥 (*Peh-kai*), 胡芥 (*Hu-kai*).—This White Mustard appears to have been brought from Central Asia to China, and especially to Sech'uen. The crop is sown in the autumn, and the herbage is picked in the winter or spring for use as a potherb. Stimulant, stomachic, diaphoretic and laxative properties are referred to the herbage and the seeds. Mustard (芥醬) would seem to have been formerly in vogue in China, as a condiment with meat. The mustard was taken as the title of the several old Chinese works. A seed of mustard was a Buddhist unit of long measure.

**SINAPIS NIGRA.**—刺芥 (*Tsz'e-kai*).—This warmer species of mustard is indigenous to China, with many other kinds, some of which would merit the name of Chinensis. This plant is supposed to act on the lungs as well as on the stomach and intestines. It was the favourite external remedy for numbness, palsy and other disorders of the nerves. The seeds were also given in fevers as a derivative to the skin, and to women suffering from amenorrhœa.

**SIPHONESTEGIA CHINENSIS.**—劉 寄 奴 草 (*Liu-ki-nu-tsʻau*).—The identification of this Scrophulariaceous plant is due to TATARINOV. The square stems, topped with the dehiscent fruit, containing millet-like seeds, are sold in Hankow as coming from Hwai-king fu in Honan. Chu chau in Nganhwui, and Han-chung fu in Shensi, are also given as habitats of the plant. The seeds and the whole plant seem to have some good effect in fluxes and hæmorrhages.

**SISYMBRIUM ATROVIRENO.**—藶 葶 (*Ting-lih*)—This Cruciferous plant, grown in Kiangsu, Shantung, Shansi, and Shensi, resembles the mustard-plant, having yellow flowers, and horned siliquose fruit. The pods contain the small, oblong, boat-shaped, and reddish seeds, which are the part of the plant at present used. They have a slightly bitter and mucilaginous taste. They are said to act as a demulcent, laxative and deobstruent drug, resembling rhubarb-root in their properties. They are given in dropsy, dysuria, amenorrhœa, coughs and in fevers.

**SMARTWOOD.**—蓼 (*Liu*).—This acrid plant is the Polygonum amphibium. The seeds are acrid, emetic and stimulant. They are applied topically to scalled head and to wounds.

**SMILAX CHINENSIS.**—土 茯 苓 *Tʻu-fuh-ling*).—Under the name of China Root two substances are evidently included. The Pachyma cocos, which may be called the *Fuh-ling*, is quite distinct from, much larger, and more common than the *Tʻu-fu-ling*, which is exported to India from China under the name of *Chob-China*. Some of it goes to Burmah, where, as we are informed by Dr. WARING, the natives call it *Tsein-apho-tasoup*. The Chinese describe a scrambling plant which resembles the Dodder in habit and appearance, as yielding the *Fuh-ling* in part. This is probably the Smilax which yields the Chinese Sarsaparilla, as it may be called, from its resemblance in character and use to the Vera Cruz Sarsaparilla, as remarked by Dr. WARING. It is not far removed from the Smilax lanceæfolia of ROXBURGH, if it be not identical. It is met with here in the form of brown, irregular, nodulated, branching, tuberous roots, with wiry radicles of some length attached to them. The interior is white and starchy, and sweet to the taste, with patches of yellow near the surface. It has been used since the *Ming* dynasty in the treatment of syphilitic diseases. It is set down as tonic, cooling, stomachic, sedative and diuretic in its qualities. Dr. WARING has found the large tuberous roots of the Burmese variety, the Smilax prolifera of ROXBURGH, very useful in the form of a decoction of the fresh root, in secondary syphilis, cachexia and chronic skin-diseases.

**SNAKES.**—蛇 (*Shié*).—The skins and flesh of several sorts of snakes, excluding the head and tail, are used in Chinese medicine. The 白 花 蛇 皮 or skin of the white spotted snake is used in leprosy, rheumatism and palsy.

**SOAP.**—鹼 (*Kien*), 肥 皂 (*Fei-tsau*).—The Chinese have no soap in general use, answering to a chemical combination of alkali and some oily or fatty substance. The first name *Kien*, or as it is sometimes written 鹹 (*Kan*), is the native soda from the north of China and Thibet, which is used to remove dirt and grease. From this name and use foreign soap is sometimes called 番 鹼 (*Fan-kien*), the latter character being written in many ways.

Dr. Williams speaks of a soap made at Tientsin, and the Cantonese sell a coarse sort of soap containing a good deal of free alkali. *Fei-tsau* is the name of the pods of the Acacia concinna, which furnish a fatty pulp made into balls, called 肥皂宅 (*Fei-tsau-toh*). Rice-water from the kitchen seems to act as a soap in cleaning clothes, as it diminishes friction in rubbing their surfaces together. Foreign bar-soap is little used in Central China, as it is too dear at present.

**SOAP, CASTILE.**—See *Castile Soap.*

**SOAP, SCENTED.**—香鹼 (*Hiang-kien*).—This article is much admired by the Chinese, and is sold at ridiculous prices by Cantonese dealers.

**SOAP-TREE.**—無患子 (*Wu-hwan-tsze*), 肥珠子 (*Fei-chû-tsze*).—This large Sapindaceous tree, the Sapindus Chinensis of botanists, is a large tree bearing round berries resembling the Melia fruit. The berries are sometimes used in making rosaries, and when roasted are eaten by the Chinese, in spite of their apparent acridity. The Tauists having employed sticks of the wood of this tree to exorcise demons, it has thence derived its name "sorrowless." The dark kernels were formerly made into a tincture, taken as a corrective and eliminant dose. They contain some saponaceous principle, which has suggested their use as a detergent application in the treatment of skin-diseases. They are not much used at the present time in Hupeh.

**SOAPSTONE.**—See *Stealite.* Soapstone is properly a silicate of alumina, used for carving ornaments. It is the Agalmatolite or Lardstone of mineralogists.

**SODA, CARBONATE OF.**—鹹 (*Kan*), 鹼 (*Kien*).—This natural salt, or natron, the product of the soil of Mongolia, resembles the Tequesquite of Mexico, and comes from the northern provinces of China, from Mongolia and from Thibet, It is brought by way of Kalgan in large quantities. It occurs in large irregular masses, white on the surface from the formation of an efflorescent salt, and is porous and somewhat translucent at times. From its hardness it is with difficulty dissolved in water, and its solution is precipitated by sulphate of magnesia. In this it differs from the *trona* of the African lakes, although in some cases a bicarbonate or sesquicarbonate is present in the sample. It contains some sulphate, and it gives a precipitate with nitrate of silver. It agrees with the mineral product of the soil of Monghyr and other parts of Bengal, known to the Hindoos as *Saja-mitti.* It is used as a corrective, purgative and deobstruent remedy occasionally, but is mainly used to clean clothes and vessels, to raise bread, to prepare cocoons for reeling, and to macerate fibres for grass-cloth. It answers all the purposes of soap.

**SODA, NATIVE SULPHATE OF.**—朴消 (*P'oh-siau*), 皮消 (*P'i-siau*).—This is a natural salt similar to the *Reh* of the Doab, in North-western India, or the *Khara-mutti* of the country of Oude, mentioned by Dr. Waring in the "Pharm. of India." It is met with as an efflorescence of the soil in Cheng-tu-fu in Sech‘uen and Ts‘ing-chau-fu in Shantung. It is continually confounded with nitre, obtained from an analogous source. The crude salt is brushed up from the soil, dissolved in water and coarsely crystallized. It is used to make the pure salt next described. As sulphate of soda and nitrate of potash crystallize very readily into large regular crystals, undistinguishable to the Chinese, they are both called 馬牙消

(*Ma-ya-siau*) and 芒 消 (*Mang-siau*). The *P'i-siau* is a rough powdery substance, of a dirty-white colour, and containing much earthy impurity. 風 化 消 (*Fung-hwa-siau*) is an efflorescent, powdery form of the drug. These substances are given to fatting pigs, and are sometimes used in tanning hides. Medically they are cautiously given as a cooling, saline, purgative, deobstruent and diuretic remedy. They are also commonly used as a stimulant to sores and ulcers, and enter into the composition of many collyria.

**SODA, SULPHATE OF.**—玄 明 粉 (*Hiuen-ming-fen*), 白 龍 粉 (*Peh-lung-fen*).—This preparation, the GLAUBER'S Salt of old books, is a celebrated drug, directed to be prepared from the cleanest *P'oh-siau* in the following ridiculous manner. Ten catties of the salt are dissolved in a picul of water, and exposed to the moon's rays during one night. The salt is then boiled with the white turnip, and exposed for another night. This process is repeated with liquorice-root, and then the saline product is heated in a vessel which is first luted down, and then carefully closed, the heat being repeated. The resulting solution is then filtered, exposed for three days to let the fire pass off from it, and is then finally to be mixed with liquorice-powder. The directions are probably not fully carried out, as the salt is met with as a white, brightish crystalline powder, having the characteristic physical and chemical properties of sulphate of soda. This salt was brought into notice in the reign of the second *T'ang* sovereign (A.D. 627-50) by a Tauist priest named 劉 玄 眞 (LIU-HIUEN-CHIN), who pointed out certain mystical properties of this salt, such as the power of causing longevity, and the procuring of immunity from all sorts of diseases, which are constantly attributed to it in Tauist books of alchemy. It is prescribed in fevers with delirium, in epistaxis, and in abdominal diseases depending upon congestion or obstruction. It is frequently used as a detergent or mild escharotic application to sores. It usually contains some trace of the presence of chlorides.

**SODA-WATER.**—荷 蘭 水 (*Ho-lan-shwui*). See *Aerated Water.*

**SOLANUM DULCAMARA.**—蜀 羊 泉 (*Shuh-yang-ts'iuen*), 苦 茄 (*K'u-kia*).—This is not clearly distinguished by the Chinese from the Solanum nigrum. Its purplish flowers and red berries are a sufficient guide. It is officinal as a diuretic, alterative, vulnerary and tonic remedy. The stalks, shoots, leaves, roots and seeds are used in the treatment of carbuncles, swellings, ulcers and skin-diseases of every kind, both internally and externally. There is a prickled variety said to be found in the South, and employed in the treatment of malarious diseases.

**SOLANUM INDICUM.**—黃 茄 (*Hwang-kia*).—This species of Solanum is confused with the Egg-plant. It is esteemed to be cooling and laxative, and is recommended in chlorosis and anæmia.

**SOLANUM LYCOPERSICON.**—番 茄 (*Fan-kia*).—This is the tomato, or "foreign dwale," whose red edible fruit is mentioned in Chinese works along with the Egg-plant.

**SOLANUM MELONGENA.**—茄 子 (*Kia-tsze*).—There are several varieties of this species, one of which having large ovoid white fruits is called the Egg-plant. The long, purple fruits of a variety much cultivated in Hupeh, make an excellent vegetable for the table. The natives believe them to be capable of causing pregnant women to abort, but they employ them as a poultice to ripen or disperse swellings.' They are sometimes given in dysentery.

**SOLANUM NIGRUM.**—天 泡 草 (*T‘ien-p‘au-ts‘au*), 龍 葵 (*Lung-kw‘ei*).—This world-wide plant is very common in China, having several names. Its black berries prove a temptation to the Chinese, who eat them after boiling them. The young shoots of this plant and those of the S. dulcamara are eaten as well. Their medical uses are merged with those of the S. dulcamara.

**SOLANUM TUBEROSUM**—洋 薯 (*Yang-shü*), 土 卵 (*T‘u-lwan*).—See *Potato.*

**SOLFATARA.**—磺 孔 *Hwang-k‘ung*).—The sulphur-pits of Formosa have recently attracted the attention of the public from the interesting account given by Mr. Taintor in the "Customs Report" for 1869. In the volcanic district of the northern end of the island of Formosa there are three *solfataras.* The first of these is about five miles from Tamsui, to the east, but is far inferior to the one distant some three or four miles in a north-easterly direction. "These pits are about 1,750 feet above the sea, in a rocky gorge in the mountains. Here from numerous vents in the rocks issue clouds of steam and sulphureous vapour. The sulphur is deposited in clusters of delicate needles of a beautiful yellow colour. Several hot springs and pools occur, and a miniature geyser throws intermittent jets of boiling water to a height of fifty or sixty feet." A third *solfatara* is described by Mr. Taintor as existing near the village of Kim-pao-li, some seven or eight miles to the N.W. of Kelung. Sulphur has been obtained at all these places by a rude process of melting, when the frothy slag is skimmed off, the heavier impurities sink to the bottom of the shallow iron pan, and the liquid sulphur is ladled out into wooden buckets, which are broken up when the sulphur has become solid. These vents have been stupidly attempted to be closed by the authorities, but with little success. They have also endeavoured to prevent the removal of the sulphur, which is however smuggled away with impunity according to Mr. Taintor. Similar *solfataras* exist in the department of Satsuma in the island of Kiusiu in Japan. The ground is volcanic and impregnated with sulphur. At the southern extremity of Satsuma is the burning "Sulphur-island" of Ivoo-sima, which is a source of revenue to the Prince of Satsuma, and supplies the Chinese even with some of their sulphur for making gunpowder. See *Sulphur.*

**SOOT.**—百 草 霜 (*Peh-ts‘au-shwang*), 釜 臍 墨 (*Fu-tsi-meh*).—This fuliginous product of the burning of vegetable matter is employed by the Chinese as an antifebrile, astringent, styptic, absorbent, alterative, deobstruent and topical remedy. The *Fu-tsi-meh* is merely the soot scraped off from the bottom of the common Chinese boiler.

**SOPHORA JAPONICA.**—槐 樹 (*Hwai-shü*).—This Leguminous tree is common in Central and Northern China, and is a frequent ornament of the large streets, courtyards and parks of Peking. The leaves are elliptico-lanceolate, greyish on the under surface, and resemble senna-leaves in their action. They have been used in India as a cathartic very successfully. An extract made from them and from the fruit, is used to adulterate prepared opium. The wrinkled fleshy, moniliform legumes often contain only one seed, from abortion, or the pod is lengthened, so as to have six or seven seeds grouped in twos or threes, by the contraction of the pod at various points. They are used in preparing a yellow dye, and are said to be tonic in their qualities. The greenish-yellow unopened flower-buds are used in dyeing cloth of a yellow colour, or in rendering blue cloth green. They are used as astringent and styptic remedies. The wood of this tree was formerly employed in the making of primitive fire-frictors, and was used as a cautery, or form of the moxa.

**SOPHORA TOMENTOSA.**—黃芪 (*Huang-k'i*).—The flexible roots of this Leguminous shrub are brought from Kung-chang fu in Kansuh, from Shansi and from parts of Hupeh, in large quantities to Hankow. The pieces are long, large as the various fingers, or even smaller, and covered with a tough, wrinkled, yellowish-brown skin, which has a tendency to break up into woolly fibres. The woody interior is of a yellowish-white colour, and the whole drug has a faintly-sweetish taste, somewhat resembling that of liquorice-root. It is in very great repute as a tonic, pectoral and diuretic medicine. The stalks and leaves are similarly employed. The second character is written as 耆 in the *Pen Ts'au* as well as 茋. This, with other distinctions, denotes the fact that the Ptarmica and perhaps other Labiate plants are confusedly described by some such name. These latter are more acrid and stimulating, and are employed externally as a means of cleansing sores. See *Ptarmica.*

**SORGHUM SACCHARATUM.**—蘆粟 (*Lu-suh*), 荻蔗 (*Tih-che*).—This tall annual Gramineous plant, the Sorgo, or Chinese Northern Sugar Cane, is described in the *Pen Ts'au* along with the Sugar-cane and the Holcus Sorghum, or Barbadoes Millet. The black seeds are sown in April, but the plant is largely propagated by cuttings. It grows to the height of some twelve to eighteen feet, with an ample inflorescence consisting of the eight or ten separate stems which group together to form the tuft of the plant. The seeds, at first green, become brown, and finally of a purplish-black colour, being produced only on the head of the plant. The large leaves, which make excellent green food, or dry fodder, for cattle, spring from the nodes of the gradually tapering stem. The seeds, called *Shaloo* in India, are very nutrient, and the colouring matter has been used in China to tint wine of a deep colour. The Sorgo is not extensively cultivated in China, but has been introduced into France, England and the United States. In the latter country good Sorgo sugar can be produced at the cost of some five or eight cents per pound, as in South Carolina, where common sugar sells at from fifteen to seventeen cents per pound. The Chinese merely chew the sweet stalks in place of the Sugar Cane. According to Dr. V. D. COLLINS, who has written an account of the Sorgo in the Journal of the N. C. B. of the R. A. S. for 1865, excellent beer, spirit and vinegar may be economically made from the juice, one gallon of good alcohol coming out of twenty-three gallons of the juice. Paper has been made in the United States from the stalks, and the French have learnt to dye silks of a beautiful colour with the purple colouring matter of the hulls, or bran, of the grain. See *Sugar Cane.*

**SOY.**—醬油 (*Tsiang-yu*) —The condiment known by this name, derived from a Chinese synonyme used by the Japanese, is a black, thin liquid, having an agreeable, saltish flavour, and frothing up of a yellow colour when very slightly shaken. It is the universal sauce of the Chinese and Japanese, and is largely exported to India and Europe as a convenient menstruum for other flavouring substances used as condiments. The yellow beans of the Dolichos soja are boiled very soft, and mixed with any cereal flour in varying proportions, and allowed to ferment and become mouldy. Salt and tea, or boiling water, are then added, and the mixture is then exposed to the sun and dew of the open air for three weeks or a month, care being taken to avoid rain. The liquid becomes much thicker, darker and more uniform in consistence, and after constant stirring is then strained and kept for use. Bran is sometimes used in making it. Large quantities are both sold from the shops and made at home by the Chinese. It is considered to provoke the appetite, and to correct any injurious quality of food. It is laxative, cooling, and and antidotal, according to Chinese estimation. It is sometimes daubed upon burns, scalds, eczematous and leprous sores.

**SPANISH FLY.**—西斑蝥 (*Si-pan-mau*).—The true Cantharis vesicatoria, or Spanish Blistering Fly, for which a distinctive name is here offered, is not known to be met with in China or in India. The Cantharis erythrocephala has been met with in Shanghai and in Chefoo, by that industrious collector, Mr. C. W. GOODWIN. See *Mylabris Cichorii.*

**SPELTER.**—See *Tutenague* and *Zinc.*

**SPERMACETI.**—鯨油 (*King-yi*).—The whale is known to the Chinese as the "king of fish," but this substance is not mentioned in their books, so far as known. Insect-wax is every way like, and as good as, the best spermaceti, and is used in precisely the same way as the latter substance (obtained from the head of the sperm whale) in inward hurts and outward wounds. See the account of Ambergris, given under the head of *Dragon's Spittle Perfume.*

**SPIKENARD.**—甘松香 (*Kan-sung-hiang*).—The true spikenard of India of the ancients is the Nardostachys Jatamansi of Royle, or the Nardus Indica of LINNÆUS. It is met with in Cochin China and in the south of China. It is generally confounded with another Valerianaceous plant, Valeriana celtica, which see. It ranked in China as one of the five odorous plants or trees, being preceded by the Lign-Aloes, Cloves, Sandal-wood, and the Aglaia odorata. It is used in India in epilepsy, hysteria and convulsive diseases. A tincture is ordered, in the Bengal Pharmacopœia, to be made by digesting five ounces of the root in two pints of proof spirit. The dose is from one to two fluid drachms. Dr. WARING speaks well of its good effects. The Chinese use it as a perfume, as a carminative and stimulant, and in the preparation of lotions for the skin. According to Dr. ROYLE this plant is one of those going by the name of *Sumbul.*

**SPIRITS OF WINE.**—燒酒 (*Shau-tsiu*).—This "distilled wine" or *Samshu* as it is called, from the words *San-shau* (三燒), or "thrice distilled," is the corn-brandy or whiskey, made in Shansi, Chehkiang and many other provinces, from all sorts of cereal grains. Millet is largely used for this purpose. Very good spirit may be made from the juice of the Sorgo. The Chinese produce a very strong spirit at a cheap rate, which serves to make tinctures, liniments and iodine-paint. It will also burn in spirit-lamps, if the article be secured free from mixture of water. Care should be taken to ask for the 元酒 (*Yuen-tsiu*), or "original spirit," a very good term for absolute alcohol. Arrack obtained from the Palmyra or Cocoanut Palms is known in China. The "Mahwa Spirit" made from the flowers of the Bassia latifolia, or *Madhaka*, the 末杜迦 (*Moh-tu-kia*), of Buddhist writings is said by Dr. WAR-

ING to be open to the objection of the same disagreable flavour as the Chinese Samshu, arising from the presence of fusel and other alcohols, which the Chinese have not learnt to separate by careful rectification. See *Brandy*, *Tinctures*, *Whiskey* and *Wines*.

**SPONDIAS AMARA.**—菴 摩 勒 (*Ngan-mo-leh*), 餘 甘 子 (*Yú-kan-tsze*).—This bitterish fruit, related to the Mango, belongs to Anacardiaceæ, and is apparently met with in Fuhkien, Kwangtung and Kwangsi. Its name is based on the Sanscrit *Amala*, a term which sometimes includes the Mango as well. Its fruits are reputed to be tonic, pectoral and alexipharmic. The juice of the fruit enters into several nostrums for the hair, the glory of the Chinese man and woman.

**SPONGE.**—海 絨 (*Hai-jung*), 水 泡 緜 (*Shwui-pʻau-mien*).—These are two common terms used in foreign hospitals in China. The sponge is scarcely known to the Chinese, or no mention is made of it in ordinary books on natural history. TATARINOV gives 靈 消 花 (*Ling-siau-hwa*), as the name of Spongilla, not known here.

**SPONGE, BURNT.**—海 絨 灰 (*Hai-jung-hwui*).—This old-fashioned remedy for bronchocele, a disease common on the Upper Yangtsze, near the Sechʻuen gorges, is not known in China, but is an instance of a favourite way of administering many drugs in the *Pen Tsʻau*. Any good derived from this preparation must depend on the iodine which may have survived the process. See *Laminaria*.

**SPRING WATER.**—井 泉 水 (*Tsing-tsʻiuen-shwui*).—Wells of water are oftenest met with in China in connexion with temples. The hardness of water from wells and springs was formerly sought to be remedied in China by the use of almonds, and any contamination of sewage, as well as hardness, was endeavoured to be removed by the use of soda, by boiling, and by allowing the water afterwards to deposit any impurity. Alum is now used for this purpose. Leaden bottoms are recommended in the *Pen Tsʻau* for vessels to contain drinking water from springs and wells. Such water is recommended for all external and hydropathic purposes.

**SPHŒRIA SINENSIS.**—See *Cordyceps Sinensis.*

**SPURGE-ROOT.**—See *Euphorbia.*

**SQUILLS.**—海 葱 (*Hai-tsʻung*).—The true Urginea Scilla is not met with in India or in China, and the name "sea onion" has been therefore coined for a most useful drug in the treatment of the large classes of bronchitic and dropsical folk met with in Hupeh at least. The Urginea Indica, or Indian Squill, growing on the sandy shores of the peninsula of India, is a fair substitute for the European drug, if gathered when quite young and small. Species of Crinum, Melanthium, Anemarrhena and Ophiopogon answer some of the purposes of Squills.

**STALACTITES.**—石 鍾 乳 (*Shih-chung-jú*).—Broken pieces of stalactitic, cup-like masses hanging from the roofs of caves in various parts of China, are coaxed into all sorts of shapes by means of pieces of bamboo. They are bright and sparry on fracture, and are usually perforated all through. The solid pieces are directed not to be used, but a powder of the fistular kind is reputed to be tussic, sedative, tonic, astringent and galactagogue in its various effects.

**STALAGMITES.**—石 牀 (*Shih-chwʻang*).—Similar properties are referred to these deposits of lime upon the floors of limestone caves, as are described under the head of Stalactites.

**STAR ANISE**.—See *Illicium anisatum* and *Oil of Star Anise.*

**STARCH**.—See *Dextrine, Rice-starch* and *Wheaten Starch.*

**STEATITE**.—磆石 (*Hwah-shih*), 滑石 (*Hwah-shih*), 活石 (*Hwoh-shwui*).—The word steatite agrees with the Chinese names here given, in that it is applied to several minerals, such as massive talc, lardstone, soapstone and figure-stone, all of which are unctuous to the touch. Steatite differs from lardstone in containing magnesia, having the composition of a silicate of magnesia and alumina. It is used in China to clean cloth from grease, and is given in diseases of the kidneys and bladder. See *Lardstone* and *Soapstone.*

**STEEL**.—鋼鐵 (*Kang-tieh*).—Three kinds of steel, or hardened iron, are spoken of in the *Pen Tsʻau.* Steel is made in Fuhkien and elsewhere, according to native accounts, but much of it is merely hammered and tempered iron. As a consequence their coarse cutlery will bear no other treatment than that of a little chiselling, in order to freshen up the edges. Good steel comes to Hankow from Hunan and Sechʻuen. Preparations of iron are directed to be made from this "hard iron." It is believed to be tonic, peptic, antiscorbutic and antipyretic. Steel is imported to some extent.

**STERCULIA BALANGHAS**.—蘋婆 (*Pʻin-pʻo*).—The fruit of this tree is confounded in the *Pen Tsʻau* with that of the apple and some sort of bullace. See *Apple.*

**STERCULIA PLATANIFOLIA**.—梧桐 (*Wu-tʻung*).—This ornamental tree is frequently met with in the courtyards of Chinese temples and houses, its large leaves affording an excellent shade. It may be readily recognized by its panicled flowers with columnar stamens, and the peculiar tendency of the follicular carpels to put on a leafy form, bearing the seeds on their margins. The seeds are oily, and hence are called after the Wood-oil tree, the Elæococca. The seeds enter into the composition of the moon-cakes eaten by the Chinese at the Autumnal Festival of the eighth month. There is an abundance of mucilage in the young branches. The leaves and liber make a hair-wash, and a soothing lotion for carbuncular and other sores. The fact that paper, cloth and ropes are made from species of Sterculia, renders it likely that under the name of *Fu-sang,* there is included some kind of Sterculia. See *Hibiscus Rosa-sinensis.*

**STORAX**.—蘇合香 (*Su-hoh-hiang*), 蘇合油 (*Su-hoh-yu*), 楓香脂 (*Fung-hiang-chi*), 白膠香 (*Peh-kiau-hiang*).—Several substances of a balsamic or terebinthinate character, and more or less resembling the substances known as Storax, or Liquid Storax, are spoken of in Chinese works. Under the article of the *Pen Tsʻau* on the genus Liquidambar, or Altingia, (楓樹) a pale yellow gum-resin is described as obtained from these trees, which grow all over China. The gum is brought from Hing-ngan-fu (Shensi) and other places, and is used as a stimulant, alterative and anti-hæmorrhagic remedy. Retentive and stimulating plasters are made of it for the treatment of wounds, sinuses and the sores of leprosy. It enters into the composition of a curious suppository, prescribed in the *Pen Tsʻau,* as a remedy for constipation. The *Fung* trees include the Liquidambar Formosana, the Liquidambar Altingia (Altingia Chinensis, Oliv.) and the maple-leaved Liquidambar Maximowiczii. These large timber-trees, with their rustling leaves and gnarled branches, have attracted the attention of the Chinese, who record all sorts of tales of them, and of the ghosts hiding in their tops. The *Chü-ling*, or Pig's Tubers, are the corky excrescences upon these trees. The moulds for making brick-tea, and many other articles are made from their wood. The bark, leaves and root are all officinal. The researches of HANBURY have proved that the substance known as Rose Maloes, which is treated of under the name of *Su-hoh-hiang* in the *Pen Ts'au*, is identical with the grey, opaque, semifluid resin known as Liquid Storax, and obtained from Liquidambar Orientalis. He has shown that Rose Maloes, (a corruption of the word *Rasamala*, applied to the Javanese product of the Liquidambar Altingia) is originally brought from Rhodes, in all probability. From thence it is shipped to Alexandria, down the Red Sea to Aden, the Persian Gulf and Bombay. From Bombay it comes to China. Surat in India, Arabia, Asia Minor, Sumatra, Annam and other countries formerly yielded it in various forms to China. Dr. BRETSCHNEIDER understands some of this *Su-hoh-hiang* to be the Balm of Mecca, yielded by Balsamodendron opobalsamum, or the *Mukul*, obtained from Balsamodendron Mukul. Dr. WARING mentions two substances as obtained in Burmah, one a light yellow balsam, and another, thick, dark and terebinthinate, which are pretty nearly described in the *Pen Ts'au*. He found little good in either of these substances as an expectorant, the main property of Storax. Stimulant, diaphoretic, carminative, anti-periodic and astringent formulæ are given in the *Pen Ts'au*, where properties closely allied to those of olibanum are referred to these forms of Storax. The Rose Maloes is dark and tar-like, but is scarce in Hankow. *Sah-tu-lo-po-hiang* (薩闍羅婆香) and *Chuh-lu-shih-kien* (咄魯瑟劍) are given in the *Pen Ts'au* as the names, in Chinese Buddhist works, of the *Fung-hiang-chi* and *Su-hoh-hiang* respectively. A terebinthinate substance called 篤耨香 (*Tuh-nau-hiang*), which may be sandarach or a product of a Cambodian tree of the Coniferous tribe, very much resembles the Burmese *Nan-ta-youk* of Dr. WARING's Indian Pharmacopœia. It is said to have the same taste as the Arabian Rose Maloes. See *Turpentine*.

**STARMONIUM.**—See *Datura Stramonium*.

**STRYCHNIA.**—See *Nux Vomica*.

**SUBLIMATE.**—See *Calomel* and *Corrosive Sublimate*.

**SUET, BEEF.**—牛脂 (*Niu-chi*).—The suet of the yellow cow is esteemed to be the best. It is used in the treatment of jaundice, and combined with Bryony-root is used as a cooling and diluent remedy. It is melted and mixed with the tallow or general fat of the cow, and is used, under the name of 牛油 (*Niu-yü*), in candle-making and in ointments. The Chinese, under the influence of Buddhism and its heresies, have a general dislike to the use of animal fats and oils. This has led to the discovery, or employment, of many vegetable fatty substances, in which their Flora is particularly rich. Butter is sometimes called *Niu-yü*.

**SUET, MUTTON.**—羊油 (*Yang-yü*).—A tea called 羊油茶 (*Yang-yü-c'ha*), is made of the fat of the sheep in the streets of Hunan towns and other places. It is used as a remedy for coughs and is a good thing for cases of phthisis, happily not so common in Central China as in Europe.

**SUGAR CANE.**—甘蔗 (*Kan-ché*), 竿蔗 (*Kan-ché*).—The sugar-cane is probably indigenous to China. The plant in use in the south, west and central parts is the Saccharum officinarum of Linnæus. A large bamboo-like Canton variety, yielding the best sugar, is called 竹蔗 (*Chuh-ché*). 荻蔗 (*Tih-ché*), a smaller cane, eaten in the raw state mostly, may be the Sorgo, or Sorghum Saccharatum, the Northern Sugar Cane of Dr. Collins. The Sugar-cane is cultivated largely in Chehkiang and Kiangsi for purposes of chewing. The cane is scraped and cut into small pieces of about an inch in length, for sale by huxters. Sechʻuen, Hunan, Fuhkien and Canton, with the Island of Formosa, grow large quantities of Sugar-cane for use as a cane to chew, or to make sugar for consumption and exportation. A red cane is called the Kwanlun cane, and a green, thin-skinned variety is called the Western cane. The juice is put down as cooling, tussic, stomachic and anti-vinous in its qualities.

**SUGAR.**—石蜜 (*Shih-mih*), 沙餹 (*Sha-tʻang*).—Sweet cane or Sugar-cane has been sucked for ages in China, along with the Sorgo-cane. In the reign of the emperor Tai-tsung of the *Tʻang* dynasty, the method of boiling the crushed cane was introduced into Sechʻuen and other parts of China from Turkestan, or Central Asia. Hence sugar is called *Tʻang*, the name of the dynasty being combined with the radical for food. Sugar is brought from Fú-chau fu, Ning-tu fu and other places in Kiangsi, from Chung-king fu and Tung-chʻuen fu in Sechʻuen, and from Chin chau in Hunan under the name of *Sha-tʻang*. *Peh-tʻang*, or "white sugar," called *Peh-sha-tʻang*, or *Shih-mih* in the *Pen Tsʻau*, comes from Amoy and Canton. This sugar is sometimes called 洋餹 (*Yung-tʻang*), from the fact that it comes in foreign steamers, Barley-sugar (冰餹) is made in Fuhkien. Coarse red sugar (紅餹) is commonly used by poor people, and is made at Swatow and in Fuhkien. The making of sugar in Sechʻuen has been interfered with by the cultivation of the opium-poppy, so that Hupeh which used to draw its supply from the Upper Yangtze, now receives sugar from Swatow and Canton in large quantities. Still the provinces of Hunan, Kweichau and Sechʻuen are able nearly to supply themselves, with some supply of the foreign sugar for those "sweets," of which so large a quantity is consumed in China. The province of Kiangsi supplies itself in part from Kih-ngan fu and Kan chau, but still imports sugar from outside places. Foreign sugar largely supplies the provinces of Nganhwui and Kiangsu. The sugar-cane is largely cultivated in Chehkiang for chewing, but the return of prosperity is inducing the natives to direct their attention to the manufacture of sugar on the same extensive scale as witnessed by the embassies of 1792 and 1816. The northern provinces are supplied from the ports of Swatow and Canton. The Swatow (汕頭) district which supplies large quantities of sugar, somewhat diminished of late, includes the districts of Chau-yang, Kieh-yang, Pʻu-ning, Hai-yang and Ching-hai, which are in the same prefecture of Cháu-chau fu, in which Swatow is also situated. Itinerant sugar-boilers perambulate the Chehkiang sugar-districts, carrying with them an iron cauldron and a pair of cylinders, according to Mr. Bowra's account in his admirable "Customs Report" of 1869. Mr. Kleinwächter says that the cane ripens in the Swatow area in October or November. The sugar-mills are of the rudest kind, being set up in the midst of cane-plantation, and are sometimes rented. In Chau-yang hien "the juice having been boiled and partly clarified is transformed into 青糖

(*Ts'ang-t'ang*), or 烏糖 (*Wu-t'ang*), a green or black sugar of a pasty description." In the other districts of Chaú-chau fu only a small quantity of good sugar is produced by the claying process. "As in the case of Black Sugar, the cane is ground and the juice is partly clarified, and having been boiled to a certain consistency, is transferred into earthenware vessels of a conical shape, the article being then known as 糖茶 (*T'ang-ts'ai*). These cones being inverted into empty vessels to drain, in a short time an article known as 機赤糖 (*Kú-ch'ih-t'ang*), is formed and partly dried in the sun. In refining, moist clay is placed on the base, renewed as required, and, in due course, removed, when the sugar, on being shaken free from the cone, is found to consist of three or four grades, that at the apex being coarse and moist, known to the trade as 漏尾 (*Lau-wei*), the next in order being 楬糖 (*Kieh-tang*), the next 楊糖 (*Yang-t'ang*), and above all 貢粉糖 (*Kung-fen-tang*), or best white." The molasses is treated afterwards to make the *Hung-t'ang*, an article which the Chinese use as a laxative remedy. Mr. Kleinwächter discusses in his "Report" for 1869, the question of the introduction of steam mills and refineries, worked by foreign enterprise, and decides in favour of the plan, if worked harmoniously, in cooperation with the native growers of the cane. Sugar is largely adulterated in China with sand and rice-meal, &c. The same ideas about the damage done to the teeth and digestive organs by sugar, entertained in Europe, are mentioned in the *Pen Ts'au*. Sugar is regarded as acting favourably on the lungs, spleen and intestines. It is given in coughs, fevers, asthma, and the disorders caused by drunkenness, and is said to remove the offensiveness of the breath after eating onions. Sugar is sprinkled upon wounds, sores, boils, and bad eyes. Sugar figures of animals have been in vogue in China for several hundreds of years, and are still used at weddings.

**SUGAR-CANDY.**—冰糖 (*Ping-t'ang*).—See *Loaf-sugar.*

**SUGAR OF MILK.**—乳糖 (*Jü-t'ang*).—The Chinese of the early *T'ang* time made wine of the cane-juice. They also dried the juice by exposure to the sun's rays, and produced coarse sugar, usually mixed with milk or cream, and generally called 石蜜 (*Shih-mih*). Thus, although these names of *Shih-mih* and *Jü-t'ang* rather meant sugar with milk, they may, with propriety, be retained to express the true Lactine, or stony-hard Sugar of Milk.

**SULPHUR.**—石硫黃 (*Shih-liu-hwang*).—Chinese sulphur was formerly obtained from the volcanic districts of Turfan, from Tangut and from Sech'uen. Sulphur-springs are met with near Chefoo, and waters containing sulphuretted hydrogen and sulphurous acid gases are not uncommon. It was brought as an esteemed article of tribute from Siam, Ceylon and Sumatra in former days. Japanese Sulphur (倭硫黃) brought from the volcanic districts of Satsuma in the island of Kiusiu, has been long known and utilized in China. It occurs in shining, greyish-yellow, beaded grains, varying in size from duck-shot to fine granules. It is much esteemed for making priming powder. At the present time Formosan Sulphur is coming into more general use, as a smuggled article. For an account of it see the article *Solfatara.* The Chinese government forbids the open trade in the article, which can only be legally purchased, for the large manufacture of fireworks used in idolatrous and festive ceremonies, from the public factories. The Indian Archipelago supplies China still, either directly, or by way of Manila, as suggested by Dr. Williams. As to the cheapness of the Formosan article, the account given in Mr. Taintor's proves that if the stupid interference of the provincial authorities with the production of the sulphur at the three solfataras near Tamsui and Ke-lung, in the north of the island, be discontinued, inexhaustible supplies of this warlike substance will come to market when wanted. The ordinary article is met with in impure, irregularly fused, crystalline masses, of a pale yellow colour. 土硫黃 (*T'u-liu-hwang*), is a rough sulphur gangue, from which the crude sulphur of the powder-manufactories is obtained. Foreign sulphur (西硫黃) is often imported in the form of the powder (硫黃粉). Much tinkering of Chinese characters is practised by Sinologues, thus the second character 黃 is often written 磺. just as the character 消 is often written 硝. As a rule the name given in the correct text of the *Pen Ts'au* is adopted for all substances described in this work. Sulphur is considered by the Chinese, with good reason, to be injurious. It is administered in rheumatism, fevers, chronic dysentery, in impotency and in worms. It is used with camphor, muricia-seeds and chaulmugra-seeds in the treatment of itch, lepra and pediculi. Powdered sulphur formerly entered into the composition of the moxa, and is an ingredient of the pastilles for suffocating mosquitoes. Cups made of melted sulphur were formerly used to hold wine to be taken as a drug.

**SULPHUR, FLOWERS OF,**—硫黃霜 (*Liu-hwang-shwang*).—This sublimed form of sulphur is scarcely known to the Chinese.

**SULPHUR, RED.**—石硫赤 (*Shih-liu-ch'ih*), 石亭脂 (*Shih-ting-chi*).—This is the amorphous form of sulphur, which has attracted some attention from its peculiar chemical and physical characters. It is flexible at first, but crumbles eventually into a powder, or becomes crystalline. It is brought from Shansi, and is probably made by mixing a small portion of some fatty substance, as suggested by the second name. It is used in rheumatism, leucorrhœa and menorrhagia. It is used in making vermilion and cinnabar. Black Sulphur (石硫青) now known to contain some impurity, is mentioned in the *Pen Ts'au.* A fragrant sulphur, called 硫黃香 (*Liu-hwang-hiang*), coming from a country called 昆南, lying thirty Chinese miles to the south of Fu-nan (Cambodia) is mentioned in the same work as a disinfectant and vermicide.

**SULPHURIC ACID.**—See *Acid, Sulphuric.*

**SUMACH.**—食茱萸 (*Shih-Chü-yü*).—It is probable that these are the fruits of the Rhus venenata, which the Chinese manage to eat, in spite of their acridity. They are given in fluxes, dropsies and indigestion. Putty and varnish are made from the expressed juice.

**SUMBUL.**—This drug is represented in Chinese pharmacy by the Angelica-root and similar drugs largely imported from Sech'uen, Shensi and other provinces. See *Spikenard.*

**SWALLOW.**—燕 (*Yen*).—Two birds are described under this name in the *Pen Ts'au*, the 胡燕 (*Hu-yen*), with its black, piebald plumage and strong voice, and the Annamitic bird, the 越燕 (*Yueh-yen*), red-breasted, small and very light in body. The migratory character of the bird is questioned. It is evident that several birds, known to be found in China, such as the Hirundo rustica and species of Sterna, Cypselus and Cotyle, are included under this one term. The flesh, eggs, feathers, urine and its mud-built nest are catalogued as having anthelmintic, antidotal and other properties, but the 燕窩 (*Yen-wo*) or Bird's Nest of the present day, the nest of a small swift (Collocalia brevirostris) which would be included under the term *Yen*, is not referred to in the *Pen Tsʻau.* It follows that this taste for such an expensive article of food is a modern freak. See *Bird's Nest.*

**SWEET-FLAG.**—See *Acorus Calamus.*

**SWEET POTATO.**—See *Yam.*

**SYMPLOCOS SINICA.**—山指甲 (*Shan-chi-kiah*).—It appears from Mr. SAMPSON's observations that this Styraceous plant, having a yellowish flower like that of the Lawsonia alba, is confounded with the latter, and therefore called "wild fingernail" plant. "Some of the genus Symplocos are used in dyeing yellow, as Symplocos tinctoria. Its root is bitter and aromatic, and others as Symplocos Alstonia are employed as tea, on account of an astringency in their leaves." LINDLEY's "Vegetable Kingdom," third edition, p. 593.

**SYRUPS.**—糖飲 (*Tʻang-yin*).—These "sweet menstrua" as this adopted term would be translated, are not much used by the Chinese druggists. The Zizyphus fruit is commonly directed as a means of correcting the taste of medicines, the efficacy of which is, however, connected by them with their nastiness. The Syrup of Ginger is given in the article on sugar in the *Pen Tsʻau*, as a stomachic and pectoral remedy.

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**TABASHIR.**—竹黃 (*Chuh-hwang*), 天竹黃 (*Tʻien-chuh-hwang*), 竹膏 (*Chuh-kau*).—This siliceous concretion found in the joints of the large bamboo-plants is understood in India to be of the nature of camphor. The Chinese did not originally derive the substance from India, but a mistake arose from the fact that the *Tʻien-chuh*, or "heavenly bamboo," a name now given to an Exogenous plant with red berries, of a very different kind, was the variety in the south of China which most frequently secreted this much prized drug. It is met with in hard, broken, angular, opaque pieces, smooth as porcelain, of a white or blueish vitreous colour, easily broken, and usually scented with some perfume. It has yielded to Professor T. THOMPSON of Glasgow the composition, in 100 parts, of Silica, 90.50; Potash, 1.10; Peroxide of iron, 0.90; Alumina, 0.40; Moisture, 4.87; and Loss, 2.23. Tabashir from Java has yielded less iron. What effect of a medicinal character it may have, would be probably due to the iron. The *Pen Tsʻau* directs it to be given in the acute convulsive, choreic and epileptiform diseases of children, and suggests its use in apoplexy and paralysis. It is also said to have vulnerary and antidotal properties. Dr. WARING says that it is highly prized in the Indian Materia Medica, and is believed to have stimulant and aphrodisiac qualities. The drug is usually adulterated in China with bone-earth and other substances. A similar substance has been found in Jungle Grass.

**TALC.**—雲母 (*Yun-mu*).—Several silico-magnesian minerals are confounded together in the long description of this soft, white, sectile and translucent mineral. It was formerly used to glaze lanterns and to make ornaments, although there is here some confusion with mother-of-pearl. The Chinese name curiously enough means "mother-of-clouds," in allusion to the hazy colour of the substance, which they associate with clouds. The substance is calcined and mixed with alum and other drugs, and given in ague, infantile dysentery, leucorrhœa and urinary disorders. It is said to quicken the pains of labour in difficult parturition, and an ointment of the prepared powder is applied to burns. The agalmatolite of mineralogists is identical with the white Chinese talc, and the specimens of 滑石 (*Hwah-shih*), are often massive talc, capable of being cut into ornamental figures. Fung-yang fu in Nganhwui, and the Lu-shan hills near Kiukiang, in Kiangsi, yield this mineral in notable quantities.

**TALLOW-GOURD.**—See *Cucurbita Pepo.*

**TALLOW-TREE.**—烏桕木 (*Wu-k'iu-muh*), 鵶臼 (*Ya-k'iu*).—This Euphorbiaceous tree, the Excæcaria (Stillingia) sebifera of botanists, is met with all over China nearly, and in Formosa. It gets its names from the fondness of the crow for its fruit. The tree has been introduced into India, where it grows well and produces better timber than in China, where it is used only for the commonest purposes, such as making chopping-boards. It varies a good deal in size in different provinces, and is readily known by its aspen foliage, which is permanent, but becomes of a brilliant red colour in autumn and winter. The leaves yield a black dye with sulphate of iron, and are rated by the Chinese as anti-scorbutic. The three-seeded berries dehisce when ripe, disclosing the kernels enveloped with the coat of vegetable fat which renders the tree so valuable. Dr. WILLIAMS says that the tree is called 桏樹 (*Kiung-shü*), in the neighbourhood of Macao.

**TALLOW, VEGETABLE.**—桕油 *K'iu-yú*), 木油 (*Muh-yú*), 白油 (*Peh-yú*), 桖油 (*Hiueh-yú*). The Tallow-tree is said by Mr. SAMPSON to yield no tallow in Canton province, where it grows so generally. The ripe nuts are bruised, and the pericarp separated by sifting. They are then steamed in wooden cylinders with numerous holes in the bottoms, which fit upon kettles, or boilers. The tallow is softened by this process, and is separated from the albumen of the seeds by gently beating them with stone mallets, when the tallow is effectually removed by sifting the mass through hot sieves. The tallow still contains the brown testa of the seeds, which is separated by pouring it into a cylinder, made up of straw rings laid one on top of the other, in which it is put into a rude press, and the tallow is squeezed through in a pure state. A picul of seeds yields from twenty to thirty catties of tallow, besides the oil (青油) which is obtained from the albumen by grinding, steaming and pressing it subsequently. This fatty substance is of a whiteish colour, hard and tasteless. It melts, according to Dr. MACGOWAN at 104,° and is composed mainly of tripalmitine, a substance which is saponified by alcoholic potash, and produces palmitic acid. It is largely used in candle-making, being mixed with white insect-wax in the proportion of three mace of wax to ten catties of the tallow. These candles are especially used in Buddhist ceremonies. It has been exported to England, and would doubtless serve to lubricate railway-axles, for which purpose it has been used in India. The average price is about eight Mexican dollars per picul. A kind of tallow from the seeds of the Garcinia purpurea which grows in Malabar, Madras and the Malaysian Peninsula, is sometimes sent to

England from Singapore. The tallow is believed by the Chinese to be emetic, purgative, hydragogue and antidotal, and similar properties are assigned to the bark of the tallow-tree. Cases of poisoning are generally treated in China with a dose of the tallow, or the oil of the albumen, but it usually comes up. The tallow is sometimes used as an ingredient in ointments, and the yellowish mixture procurable from the candle-makers is useful in making up suppositories. Large quantities of vegetable tallow are exported from Hankow, the supply coming from Kingmun Chau and other places in Hupeh. The refuse of the seeds and the husks are used as a manure for tobacco-fields, and as a fuel.

**TAMARA.**—See *Lotus* and *Nelumbium.*

**TAMARIND.**—菴弭羅 (*Ngan-mú-lo*).—This Buddhist version, in Chinese, of the Sanscrit *Amla*, the name of the Tamarindus Indica, is only met with in their works. See EITEL's "Handbook of Buddhism," pages 7 and 8.

**TAMARIX CHINENSIS.**—三春柳 (*San-ch'un-liu*), 赤檉 (*Ch'ih-ch'ing*).—TATARINOV gives these characters for the Chinese Tamarisk, a tree unknown here. There is a kind of gall, and a honey-like manna produced upon some of these trees in Arabia and Persia. The Tamarix Gallica produces a gall, called *Bara mai* (Hind.) which has been used as a topical and internal astringent. The T. Orientalis yields, in India, a smaller gall called *Chota mai* (Hind.) which with the bark of the tree, is used as an astringent. There is a description of what the Chinese take to be a willow under one of the articles on that tree in the *Pen Ts'au.* It may be the Tamarisk, the long branches of which are said to be used as whips, and the wood is made into charcoal. The tree is said to denote the approach of rain by the drooping of its branches. The 檉乳 (*Ch'ing-jü*), used as a vulnerary application may be the honey of the Tamarisk. See *Manna.*

**TANNIN.**—槲皮精 (*Huh-p'i-tsing*).—This term "oak-bark essence" is coined.

**TAR.**—黑篤耨 (*Heh-tuh-nau*).—The *Pen Ts'au* refers, under the article 篤耨香 (*Tuh-nau-hiang*), to a product of some Coniferous tree, obtained by heat. Tar is sometimes confounded with, and named after, Black Dammar (吧嗎油). A substance called 松湝 (*Sung-i*), would have some resemblance to tar, and is used in the treatment of many skin-diseases in men and domestic animals. See *Turpentine.*

**TARO.**—芋頭 (*Yú-t'u*).—The esculent corms of this Aroid plant, variously called Colocasia, or Caladium, are cultivated and eaten largely in Hupeh, in much the same way as the Colocasia macrorhiza is produced in the South Sea Islands. They are called *Kopeh* or *Taru* (a term properly applied to edible fern-rhizome) in the South Seas, and from the latter word the word "Taro" has been corrupted.

**TARTAR EMETIC.**—鑞砂 (*Lah-sha*).—The name for this soluble salt, made by boiling trioxide of antimony with a solution of cream of tartar, is coined. See *Antimony,* and *Cream of Tartar.*

**TEA.**—茗 (*Ming*), 苦搽 (*K'u-t'u*, or *ch'a*), 檟 (*Kia*), 蔎 (*Sheh*), 荈 (*Ch'uen*), 茶 (*Ch'a*).—The variety of names here given denotes the well-known fact that several kinds of shrubs have furnished at various times the tea-leaf of different periods or places in China. The name *Ming* belongs to the time of the *T'ang* dynasty, and is still used in literary composition.

It originally denoted the late pickings of the tea-shrub. The name *K‘u-t‘u*, or *K‘u-ch‘a*, denotes the Chicory-leaf, and also the present leaf, although there is some confusion about the characters. On this point see the article on Chicory. The Classics refer only to the 荼 (*T‘u*), which may have then also referred to the present tea-leaf, which is no doubt indigenous to the country. The word *Kiu* probably referred to the Chicory and also to the Sageretia theezans, a Rhamnaceous shrub, the leaves of which furnish tea at the present time for the poor, who have less chance than ever of getting cheap tea, from the great drain of the crop towards foreign countries. The tea-shrub is a low, stunted bush, growing upon the hill-sides and tops of all parts of the tea-country. The soil generally affected by it in Hupeh is red, disintegrating sandstone. The *Wu-i-shan*, or Bohea Hills, in the north-western part of Fuhkien, and the scattered hills in the Han-ning, Tsung-yang and other districts of the Wu-chang prefecture of Hupeh, are large sources of the best teas. There are probably two or three or more varieties of the tea-plant, such as the Thea Cantoniensis (Bohea) and the Thea Viridis, by some determined to be distinct species. The Indian tea is also set down as the Thea Assamica. The genus Thea belongs to the order Ternströmiaceæ, and is unfortunately called by the same name (*Ch‘a*), as the Camellia, a beautiful plant of the same order. The plant is propagated by seedlings. The seeds are very often abortive, from the damage done to the tree by picking its leaves. They follow the white flower, and would appear to contain oil, although the so-called Tea-oil is yielded by the Camellia oleifera (山茶). The leaves are shining, evergreen, ovate-pointed, and coarsely-toothed. The tea-shrub in Central China is the Thea Viridis of botanists, and the leaves are perhaps more lancoalate than those of the Thea Cantoniensis. Both the green and the black, or reddish, varieties of tea-leaf may be produced from either plant. The leaves are picked at three or more occasions in the year, the first picking, which is the best, taking place in April. The leaves are slightly dried in the sun, crushed by the feet of coolies in tubs, in order to get rid of useless watery juices, and to give a twist to the leaf. The leaf undergoes a series of heatings at a low temperature, is winnowed, picked and packed in lead-lined chests, which are arranged in "chops" of from four hundred to six hundred and fifty chests. The stalks are usually rejected, but contain all the properties of the leaves. Crops of leguminous plants are grown between the tea-bushes, in order to furnish a green manure for the rice-fields. This interferes somewhat with the access of light and air to the tea-plant, but it has the advantage of keeping the soil well stirred up and open. The extensive growth of the tea-shrub, and the levying of a tax on tea, occurred in the reign of Teh Tsung, the *T‘ang* emperor of the seventh century after the Christian era. The two great authorities on tea in China are 陸羽 (Luh-yu), the author of 茶經 (*Ch‘a-king*), or "Classic on Tea," and 盧同 (Lu-t‘ung), who were both great tea-drinkers. The native names for the favourite home-teas for themselves are very different from those of the foreign market. 龍井 (*Lung-ching*), 雀舌 (*Tsioh-sheh*), and 巖茶 (*Yai-ch‘a*) are names of good teas in high repute at tea-shops. 珠蘭 (*Chü-lan*) is a tea brought from Fuhkien, and scented with Aglaia flowers. It answers to the Scented Caper of foreign markets. The internal trade in tea is considerable, but is becoming affected by the large amount diverted to foreign countries. There was formerly a large trade through Si-ning-fu in Kansuh with Mahommedan and other tribes, who brought horses in exchange. This trade still continues, but is likely to be interfered with by the introduction of Indian tea into Turkestan, just as the Russians established in Hupeh have taken the making of brick-tea for the Mongols, Siberians and Kirghis out of Chinese hands. Tea is produced in all the provinces of China, south of the Yellow River. Hupeh, Fuhkien, Hunan, Nganhwui, Kiangsi, Yunnan and Sechʻuen furnish the largest portion of the leaf. Yunnan, Kweichau and Honan furnish supplies of tea for native consumption, and even Shantung sends a tea, probably the leaf of an Oleaceous shrub, which is in much repute in some parts of the country. Tea is described in the *Pen Tsʻau* as cooling, peptic, exhilarating, rousing, both laxative and astringent, diuretic, emmenagogue, and in large, concentrated doses emetic. Taken in large quantities for a long time it is believed to make people thin and anæmic. Weak tea is a favourite wash for bad eyes and sore places. Tea-seeds (茶子) are said to benefit coughs, dyspnœa and singing in the head. All these effects, except that on the menses, can be confirmed from observation. New tea is decidedly laxative. The use of strong tea in cases of opium-poisoning, in the place or absence of coffee, is very desirable. In cases of uræmic poisoning the diuretic properties of the tea-leaf are worth a trial. The large proportion of nitrogen in tea, amounting to nearly six per cent. must render it a powerful agent, and a positive nutriment, if the leaves be eaten as well. This is constantly done in Mongolia. The tendency of the processes of exposure to natural and artifical heat, and the maturation of the leaf, must issue in the oxidation of the chemical substances, thus producing more extractible matter, capable of solution and digestion. The experiments of Peligot show that tea is meat and drink, and that the people who boil their tea-leaves are right. The willow has been long used to make what is called 甜茶 (*Tʻien-chʻa*), or "sweet tea." The leaves of the Salix Alba (白楊) are largely used in Shanghai to adulterate tea. The "Maloo mixture" has shown how tea may be positively *made* up, to say nothing of adulterations, which are creditably rare in the interior of the country. Brick-tea (磚茶) is met with in the Hankow market in two sizes. The large green brick-tea called 東口 (*Tung-kʻau*), as it goes to Mongolia through the Kalgan Gate of the Great Wall, is made by the Russian factors at Hanning and Tsungyang in Hupeh. The small green brick-tea (貢茶) is much finer than the large green bricks, and with the black brick-tea (米磚) is made in the same moulds. These teas go to the Siberians, Buriats, Tungusic and Kirghis tribes, as well as the Mongols. It is by no means an inferior tea, as a rule, and the tea is actually eaten, the leaves being chopped up with salt and butter, or koumiss. These bricks are used as a convenient means of barter.

**TEA-LEAF.**—茶葉 (*Chʻa-yeh*).—The Chinese understand the infusion to be meant when the word *Chʻa* is used by itself in ordinary speech. See *Tea*.

**TEA-OIL.**—See *Oil of Camellia* and *Tea*.

**TEA-STONE.**—茶石 (*Chʻa-shih*).—This is a kind of smoky quartz, in much favour with the Chinese as a material for making spectacles for shading weak eyes. Good specimens sell at a tolerably high price.

**TENREC.**—For this animal, sometimes called Tendrec, see *Centetes Illiger*.

**TERMINALIA CHEBULA.**—訶 黎 革 (*Ho-li-leh*), 訶 子 (*Ho-tsze*).—The fruits of this tree, as well as those of the Terminalia Bellerica, have been long celebrated in European and Indian medical practice under the name of Myrobalans. The first name is an imitation of some Sanscrit name, the drug having been brought by T'ien-wang from India. The tree grows in the Canton province according to Chinese account, and resembles the Sapindus Chinensis. It belongs to the order Combretaceœ, and produces in India a peculiar gall-like excrescence upon its leaves, the result of the deposition of the ova of some unknown insect. These are called *Kadu-kai-pu* in Tamul, but are not known in China. They are astringent, and very useful in infantile diarrhœa. Cochin China, Persia, and Arabia supplied the Myrobalans to China, in former days. As they are placed in the *Pen Ts'au* just after galls, and not along with fruits, it is possible that the galls of the tree were imported along with the fruit. The Myrobalans fruits are deeply-furrowed, wrinkled, oblong and pointed at the lower end. They vary from one to one inch and a half in length, and are of a reddish or greenish-yellow colour. The interior is hard and woody, and the taste is bitter. They are used in China as a mild laxative, deobstruent, tonic, carminative and even astringent remedy, variously combined with other drugs to determine its action to the lungs, stomach and intestines. The drug is of an inert nature judging of the samples sold at Hankow. In India it is used as a topical and general astringent drug, highly extolled by the natives. Twining has found the fruits serviceable in enlarged spleen, a very common disease in Hupeh. Curious accounts are given in the *Pen Ts'au* of ships unable to move at sea through the slippery mucus of some great fish, being able to get away after pouring overboard a decoction of the fruit. Hair-dyes, diet-drinks and charms to drive away all diseases are spoken of as made from them.

**TERNSTROMIA JAPONICA.**—水 木 犀 (*Shwui-muh-si*).—This fragrant plant, belonging to the same order as the Tea-shrub and the Camellia, has been identified by Hoffman and Schultes. It is probably used to scent tea, and is said in the *Kwang-kiun-fang-pu* to be employed as a kind of henna to dye the finger-nails.

**TERRAPIN.**—水 龜 甲 (*Shwui-kwei-kiah*), 敗 龜 版 (*Pai-kwei-pan*).—This is the plastron of certain species of land, or fresh-water, tortoises called 烏 龜 (*Wu-kwei*), from the dark colour of the skin and of the parti-coloured shell. Several species are enumerated in the *Pen Ts'au.* The tortoise is believed to undergo no transformations, and hence its sacredness in the eyes of Buddhists, and its efficacy in the estimation of Chinese writers. The aquatic species is officinal. Its carapace, divided into twenty-eight plates on the edges, is called 蔡 (*Ts'ai*), and is used in divination. It casts its shell once a year, and is fond of burrowing in the earth in cold weather. The Chinese employ it to open up gutters and drains. One sort is said especially to feed upon cicadas. They are kept in tanks in Buddhist temples, and it is esteemed very meritorious to feed them, or to add to their number by purchasing them alive from the stalls of the streets, where they are constantly exposed for sale as food. When a tortoise is thus purchased a hole is made in the shell, and a creature with several such holes, often fitted with rings, is much prized as a drug. Jelly made from the plastron, or the powdered shell made into pills or mixed up in cakes, is reputed to be tonic, cordial, astringent and arthritic, and very useful in diseases of the kidneys. The ashes are given to parturient women, and are used as a dusting-powder for sores and wounds.

**THALICTRUM RUBELLUM.**—升 麻 (*Shing-ma*).—The root-stocks of this Ranunculaceous plant, have nothing to do with hemp, in spite of the Chinese name, which is given to the plant from the likeness of its leaves to those of the Böhmeria, or Grass-cloth plant. They are brought from Sech‘uen, Shensi and Kansuh. They are met with as dark-brown, irregular pieces, bristled with rootlets, and having more or less of the stems attached to them. The taste is bitterish. The drug is credited with antidotal, tonic and derivative qualities. It is said to be useful in leucorrhœa, menorrhagia and prolapsus recti. The Indian Pharmacopœia quotes the native account of the *Pila jari*, or Thalictrum foliolosum, a tonic and antiperiodic remedy, combining some aperient property, found in the root when administered as a powder, or as an extract prepared as that from gentian-root.

**THERMAL WATERS.**—See *Mineral waters.*

**THORNAPPLE.**—See *Datura Stramonium.*

**THREAD.**—See *Twine.*

**THUJA (BIOTA) ORIENTALIS.**—栢 樹 (*Peh-shü*).—This tree, and the Cupressus thyoides would appear to be amongst the Coniferous trees which furnish Cypress-wood, much used by the Chinese upholsterers, and to be of the trees which Chinese gardeners delight to dwarf and train into all sorts of animal shapes. The leaves are used as decorations, and garnitures of presents, and are employed as astringent and styptic remedies. The small fruits (栢 實) are stripped of their coverings, and are sold in the shops as small, ovate-pointed, reddish-yellow, strong-smelling, oily kernels, called 栢 子 仁 (*Peh-tsze-jin*). They are used as stimulant and tonic elements in prescriptions.

**TIGER.**—See *Bones of Tiger.*

**TIN.**—錫 (*Sih*), 洋 錫 (*Yang-sih*).—See *Pewter*. Tin is said to be met with in the country of the Karchin tribes of Mongolia.

**TIN-PLATES.**—洋 鐵 (*Yang-tieh*), 馬 口 鐵 (*Ma-k‘au-tieh*).—Large quantities of tin-plates, as well as the lining of packing cases, are imported at all the ports open to foreign trade, and made into all sorts of ware for domestic use.

**TINCAL.**—黃 蓬 砂 (*Hwang-p‘ung-sha*).—This substance corresponds to the unrefined, yellowish variety of borax, met with in China, and is said to come from countries to the south. See *Borax.*

**TINCTURES.**—藥 酒 (*Yoh-tsiu*).—Chinese tinctures, or "medicinal wines," are often wines made by fermentation of the substances employed. Some are acetous tinctures, and other are actual tinctures, made by simply digesting the drugs in the native spirit. These alcoholic preparations are given in chronic affections mainly, and especially in cases where derivation to the skin, as in rheumatism, is desired.

**TINCTURE OF ALOES.**—蘆 會 酒 (*Lú-wei-tsiu*).—This name (coined) answers for both the Tincture and the Wine of Aloes.

**TINCTURE OF ACONITE.**—烏 頭 酒 (*Wu-t‘u-tsiu*).—This preparation is not used by the Chinese.

**TINCTURE OF ARALIA PALMATA.**—五加皮酒 (*Wu-kia-p'i-tsiu*).—This is a compound tincture, sometimes made as a fermented wine, and in much repute for bruises, debility and rheumatism.

**TINCTURE OF ARALIA EDULIS.**—當歸酒 (*Tung-kwei-tsiu*).—This preparation, the Tincture of Sumbul of Chinese pharmacy, is made plain and fermented.

**TINCTURE OF ASSAFŒTIDA.**—阿魏酒 (*O-wei-tsiu*).—This preparation is not known to the Chinese at present. It is worth using in mixtures containing remedies for opium-smokers, who are apt to get a liking for their physic, and have to be weaned of that too.

**TINCTURE OF BENZOIN.**—安香酒 (*Ngan-hiang-tsiu*).—This or the compound tincture makes an excellent application to ill-conditioned sores or wounds amongst the Chinese. Tauist priests resemble the friars of former days in their assumption of healing powers.

**TINCTURE OF CAMPHOR.**—樟腦酒 (*Chang-nau-tsiu*).—This Spirit of Camphor is not a Chinese remedy, but makes a good liniment for sprains and rheumatism.

**TINCTURE OF CAPSICUM.**—辣酒 (*Lah-tsiu*).—This tincture is readily made from the dried Capsicum-berries, and is a good addition to stomachic mixtures or gargles.

**TINCTURE OF CARDAMOM.**—草果酒 (*Ts'au-kwo-tsiu*).—See *Amomum medium.*

**TINCTURE (COMPOUND) OF CARDAMOM.**—豆蔻調酒 (*Tau-k'au-t'iau-tsiu*).—The compound tincture, made with Amomum Amarum (益智子) or the Galangal-fruits (高良薑子), the Canton peel (廣皮), native Cassia (桂皮) and Fennel-seeds (小茴香), makes a cheap remedy of good effect in the dyspepsia of the Chinese attending Mission-Hospitals, and a good dose for opium-smokers.

**TINCTURE OF CARRAGANA.**—黃精酒 (*Hwang-tsing-tsiu*).—This is a fermented compound wine, containing Lycium, Atractylodes and Melanthium, and is given as a tonic in all sorts and conditions of disease.

**TINCTURE OF CASTOR.**—膃肭酒 (*Wuh-nuh-tsiu*).—See *Castor.*

**TINCTURE OF CATECHU.**—烏泥酒 (*Wu-ni-tsiu*).—See *Catechu*, and *Uncaria Gambir.*

**TINCTURE OF CINNAMON.**—桂皮酒 (*Kwei-p'i-tsiu*).—The Chinese do not usually make a preparation of this kind.

**TINCTURE OF CITRON.**—枸櫞酒 (*Kau-yuen-tsiu*).—See *Citron.*

**TINCTURE OF GENTIAN.**—龍膽酒 (*Lung-tan-tsiu*).—This and the Compound Tincture can be very well made of Chinese drugs. The natives have no particular formula.

**TINCTURE OF GINGER.**—薑酒 (*Kiang-tsiu*).—This is a tonic and stomachic (fermented) preparation used by the Chinese, who add the root of a Polygonum to it.

**TINCTURE OF GINSENG.**—人參酒 (*Jin-san-tsiu*).—This tonic tincture is made by mixing powdered ginseng-root with rice and leaven together in a covered vessel, and when the fermentation is over the dregs are separated. It is also prepared as an ordinary tincture. It is not in much use at the present time.

**TINCTURE OF IODINE.**—海靛酒 (*Hai-tien-tsiu*).—See *Iodine* and *Iodine Paint*.

**TINCTURE OF IPECACUANHA.**—嘔草酒 (*Ngau-tsʻau-tsiu*).—This preparation, unknown to the Chinese, is more reliable than the Wine, which is apt to deposit a good deal in China.

**TINCTURE OF JUSTICIA.**—黃連酒 (*Hwang-lien-tsiu*).—An excellent bitter tincture may be made from this root by digesting three ounces of the sliced root and two ounces of Canton orange-peel cut very fine, for a week in a pint of good brandy, or in a mixture of fifteen ounces of native spirit with five ounces of pure water. Care should be taken to buy the "yellow" root, instead of the "red" root (紅連) which is often very inferior, if not a positive substitution. See *Justicia*.

**TINCTURE OF LYCIUM.**—枸杞酒 (*Kau-ki-tsiu*).—A tincture of the Berberis Lycium, or Chinese Barberry is used in the treatment of rheumatism, debility and diseases of the eye. Take of the best root of the Barberry, cut small, twelve ounces; Proof Spirit two pints. Macerate for a week in a closed vessel, with frequent shaking of the contents. Strain, press and filter, taking care to add sufficient proof spirit to make up two pints. This preparation is an imitation of the Indian tincture, strongly recommended by Dr. WARING as an antiperiodic, from three to six fluid drams being given just before the coming on of the cold stage.

**TINCTURE OF MELANTHIUM.**—天門冬酒 (*Tʻien-men-tung-tsiu*).—This native preparation may be made in the same way as the Tincture of Squills of the British Pharmacopœia, for which it may be substituted. The Chinese give it as a sedative, lenitive and alterative in chronic visceral diseases.

**TINCTURE OE MYRRH.**—沒藥酒 (*Muh-yoh-tsiu*).—A tincture of common myrrh, or bdellium, makes an excellent stimulant for fetid sores amongst the Chinese.

**TINCTURE OF NUX VOMICA.**—馬錢酒 (*Ma-tsʻien-tsiu*).—A tincture of the beans of Nux Vomica makes an excellent addition to tonic and stomachic mixtures, correcting that strong tendency to tympanitic distension which is characteristic of most Chinese dyspeptics.

**TINCTURE OF ORANGE-PEEL.**—陳皮酒 (*Chʻin-pʻi-tsiu*).—There is no native preparation of this kind, as the Chinese doctors believe Orange-peel antagonistic to wine. A tincture is best made from a mixture of the various kinds of peel, in the proportion of three ounces of the peel to a pint of diluted samshu.

**TINCTURE OF OPIUM (AMMONIATED).**—黑酒 (*Heh-tsiu*).—Although as a rule, stimulant and tonic remedies are indicated for the cases of opium-smokers renouncing the drug, occasionally opium has to be given, and for such cases this "black wine" makes an excellent dose, having no name or smell of opium. Take of native (Sechʻuen) opium one hundred and fifty grains, assafœtida one ounce, saffron two hundred grains, strong solution of ammonia three fluid ounces, and native spirit seventeen fluid ounces. Macerate for a week (or longer in cold weather) in a well closed vessel, frequently shaking the mixture; then strain, press, filter and add more spirit to complete the imperial pint. This may be given in one dram doses, gradually diminishing the quantity, and substituting some tonic remedy at the sometimes.

**TINCTURE OF THE FIVE POISONS.**—馮了姓藥酒 (*Fung-liau-sing-yoh-tsiu*).—

This is an abominable dose, named after a man called FUNG, and usually brought from Canton. It is made by putting centipedes, scorpions, snakes and at least two more kinds of venomous creatures into samshu. It is given in catarrh, coughs, ague and rheumatism, and appears to cause some degree of sweating and derivation to the skin. This wine is placed in earthen jars outside the shops of the well-to-do people, to be taken by poor persons as a prophylactic remedy.

**TINCTURE OF RHUBARB (COMPOUND).**—屠蘇酒 (*T'u-su-tsiu*).—This is an alexipharmic and prophylactic tincture made from Aconite, Abrus, Libanotis, Xanthoxylum, Platycodon, Rhubarb, and other roots.

**TINCTURE OF SQUILLS.**—海葱酒 (*Hai-ts'ung-tsiu.*)—See *Squill.*.

**TINCTURE OF STRAMONIUM.**—風茄酒 (*Fung-kia-tsiu*).—See *Datura Stramonium.*

**TINCTURE OF TOBACCO.**—烟酒 (*Yen-tsiu*).—A wine similar to that directed in the old Edinburgh Pharmacopœia is prescribed in the *Kwang-k'iun-fang-pu.* It is given in cases of rheumatism, neuralgia, tympanitis and suffocative catarrh. The Chinese tobacco is weaker than the Virginian kind, but the Chinese choose the summits of the stems as the best.

**TINCTURE OF VERATRUM.**—藜蘆酒 (*Li-lu-tsiu*).—This preparation is not used by the Chinese. The name is that of the Black Veratrum.

**TINCTURE OF VALERIAN.**—甘松酒 (*Kan-sung-tsui*).—This is not a Chinese remedy. The Ammoniated Tincture of Valerian, or the ordinary preparation combined with Fetid Spirits of Ammonia relieves some of the sufferers from opium-smoking.

**TOBACCO.**—烟草 (*Yen-ts'au*), 仁草 (*Jin-ts'au*), 淡巴菰 (*Tan-pa-ku*).—This exotic plant was probably introduced from the West by way of Japan or Manila during the 16th or 17th century, according to Mr. MAYER's researches, given in the May number of the Hongkong "Notes and Queries" for 1867. It was forbidden by both the *Ming* and Tartar emperors, the latter perhaps having had some previous experience of the leaf in their native country. The plant is now mentioned in KANGHI's Dictionary, published in the early part of the 18th century, but this may have arisen from the prohibition laid upon it. It is not mentioned in the *Pen Ts'au*, but it is noticed fully in the *Kwang-k'iun-fang-pu*, the Imperial Herbal published in the year 1708, in an amended form. It now grows in most of the provinces, appearing among the exports from Hankow, T'ientsin and Swatow in large quantities. Fuhkien was one of the first provinces to receive the plant, and still has a great name for its produce. Sin-hwui-hien, Nan-hiung-chau and Cháu-chau-fu, all in Kwangtung (Canton) province; Sui-chang-hien and Sui-chau-fu in Kiangsi, Hang-chau-fu in Hunan, Lan-chau-fu in Kansuh and places in Chehkiang and Pehchihli furnish notable qualities or quantities of the raw or prepared leaf. The plants appear to be the Nicotiana fruticosa and Nicotiana rustica, var. Chinensis. The leaves vary a good deal in size and colour. The yellow leaf (黃烟) is stalked, hairy and ovate-pointed, and has a good smell. The water-tobacco coming from Lan-chau-fu (Kansuh) is called 西菸 (*Si-yü*), and is highly esteemed. Very little care is taken in securing the tobacco-leaf, which comes down the Yangtsze from Sech'uen, Hunan and other provinces in open boats, with the stacked leaf lightly thatched over the top. It has less flavour and strength, in the hands of the Chinese, than foreign tobacco, but the Russians manufacture large quantities of cigarettes of it, and of Mongolian tobacoo. The tightly packed leaves are cut up into very fine threads (烟絲) by means of planes, and mixed with some yellow ochre, arsenic and other compounds to modify the colour, flavour or effects of the article. Dr. WILLIAMS says that the leaf is sometimes soaked with a solution of opium. The general use in Hupeh of the water-pipe must neutralize some of the effects of a habit most universally indulged in by all classes in China. The acrid and expectorant properties of tobacco are well understood by the Chinese. The mixing of arsenic with the Peking tobacco, mentioned by LOCKHART, is a curious fact. The cut leaf is used to staunch wounds. The use of cigars (筆烟) and cigarettes (孖姑烟) is confined to the Cantonese. Tobacco is not chewed in China, and the use of snuff (鼻烟) is declining, having always been very much confined to the wealthy. Medicated snuffs for the treatment of epistaxis and polypus of the nostrils are very often prescribed in the *Pen Ts'au*. A tobacco of Lobelia was formerly common in China. Coltsfoot-tobacco is smoked in some parts of China. The character for tobacco has been written 煙, of late years. The word *Tan-pa-ku* is probably a corruption of some such word as the Hindustani *Tambaka*. See *Tincture of Tobacco*.

**TOMBAC.**—淡巴菰 (*Tan-pa-ku*).—Lobelia, Tobacco and the Agallochum are all called by this name, which is common to several Asiatic languages.

**TORREYA NUCIFERA.**—榧實 (*Fei-shih*).—The fruits of this Taxaceous tree, not far removed from the Yew, are collected in China and eaten as hazel-nuts are elsewhere. They are brought from Kin-hwa fu in Chehkiang, Han-yang fu in Hupeh, and Hwui-chau fu in Nganhwui, amongst other places. They are from three-quarters to one inch and a quarter long, oblong, pointed at either end, but more sharply so at the upper end. The skin is of a reddish-brown colour, mottled with patches of a darker tint, woody, fragile and marked longitudinally with broad, shallow striæ. The kernel is much roughened, obscurely villous, and covered with a thin, reddish-brown menbrane. They have little taste, but are reputed to be peptic, anthelmintic, laxative and tussic in their qualities. They are oily, and an oil is obtained from them by pressure in Japan.

**TORTOISE.**—See *Emys*, and *Terrapin*.

**TORTOISE, GREEN.**—緑毛龜 (*Luh-mau-kwei*).—This "green-haired turtle," or tortoise, is a small fresh-water turtle, provided with a growth of green conferval filaments of an inch and more in length, some of which are said in the *Pen Ts'au* to be golden. It lives in bowls on fish and shrimps, and is brought to Hankow from Lí chau in the northern part of Hunan, and from Kí chau on the Yangtsze, near Hwang-chau fu (Hupeh), the birthplace of LI SHI-CHIN, the author of the *Pen Ts'au*. Nan-yang fu in south-western Honan formerly had these creatures, credited with the power to drive away poisonous snakes and serpents. The carapace is said to have three ridges along its surface, whilst the plastron is of the colour of ivory. The common freshwater turtles appear to be subject to the same growth of parasitic confervæ. The animal with its flesh entered into the composition of nostrums for debility, congenital weakness, fevers and other less definite maladies

**TOW.**—麻瓤 (*Ma-niang*).—This name for the refuse of hemp, and for oakum, used in caulking junks, is also applicable to the useful article employed to pad splints.

**TRAPA BICORNIS.**—菱 角 (*Ling-koh*).—This aquatic member of the Haloragaceæ is abundantly produced in the lakes and ponds of Hupeh, without any care or culture. Its horned fruits have the appearance of a buffaloe's head, and when broken open and spread for sale in the streets look like "grinders" in a country chemist's shop-window. They are simply used as articles of food, a meal being sometimes made of them. These Trapas, with the Buck Bean (苦 草), Hippuris, and perhaps other similar water-plants were the 菰 or 苽 *Ku*, a kind of vegetable food ordered in the Chau Ritual to be eaten with fish, and forming one of the six kinds of grain, now reduced to five.

**TRAPA TRICORNIS.**—芰 實 (*Ki-shih*).—This species or variety of the Water Caltrops, as well as a four-horned variety spoken of, are eaten as food. The flowers are astringent, and enter into the composition of beard-dyes.

**TRAPA NARANS.**—浮 菱 (*Fau-ling*).—This plant produces nuts which are cooked and eaten. They are identical with the Water Chestnut of the French.

**TREACLE.**—烏 糖 (*Wu-tʻang*), 糖 漿 (*Tʻang-tsiang*), 糖 膏 (*Tʻang-kau*).—Treacle, or molasses is met with in some quantities in the sugar-producing districts of Cháu-chau fu, but it is not an article of trade, or general consumption. The coarse red sugar (紅 糖) which replaces treacle in Chinese domestic economy is very moist and treacle-like. It is used as a laxative, and is dissolved in warm water and given in colic or dyspepsia.

**TREE-WAX.**—樹 蠟 (*Süh-lah*).—This is a name of Insect Wax, which see.

**TREMOLITE.**—See *Asbestous Tremolite.*

**TRIBULUS TERRESTRIS.**—白 蒺 藜 (*Peh-tsih-li*).—One or two species, or varieties of this Zygophyllaceous plant are met with in China, including the Tribulus lanuginosus which is the *Nerinji* of India, held in high repute in the south (according to WARING) as a diuretic. The spines of one of these plants, exhibited upon the small carpels, seem to have suggested to the Chinese the form of their iron caltrops, thrown upon the ground to hinder the march of an enemy. These fruits, have four spines, are said to be tonic, and very serviceable in spermatorrhœa. Some of them have been given to parturient or anæmic women, as they are credited with abortifacient, galactagogue and alterative properties. These fruits were formerly officinal in Europe, according to HANBURY.

**TRIBULUS-SEEDS.**—沙 苑 子 (*Sha-yuen-tsze*).—Small, flat, dark, reniform seeds are brought to Hankow from Yü-chau in Honan, which are the seeds of a species of a Tribulus. They are worth trial as a diuretic. See "*Ph. of India,*" page 39.

**TRICHOSANTHES DIOICA.**—括 樓 (*Ko-lau*).—The brownish-yellow dried rind of this fruit is met with in Hankow drug-shops in broken, or collapsed, pieces indicating a globular fruit of some three or four inches in length. The large, flat, brown seeds are also met with separately from the rind, and are believed to be demulcent, diuretic, tussic and expectorant in their effects. They are called by the name 瓜 蔞 子 (*Kwa-lau-tsze*). This name is given by TATARINOV as his identification of the Trichosantes palmata, a plant which under the name of *Indraian*, or *Indrayan* is in use in India as a tonic or purgative. These seeds yield an oil, but the fruit is probably injurious when eaten. The large tuberous roots of a Trichosanthes yield a white powder which is called 白藥 (*Peh-yoh*), or 天花粉 (*T‘ien-hwa-fen*), and is used as a febrifuge, tonic and vulnerary remedy. The Bryony and several Cucurbitaceous plants are probably included under the heading given above from the *Pen Ts‘au*. Following the account of these 天瓜 (*T‘ien-kwa*) plants, as they are also called, is the 土瓜 (*T‘u-kwa*), which has the various synonymes of 王瓜 (*Wang-kwa*) and 赤雹子 (*Ch‘ih-pau-tsze*). This is set down by TATARINOV as Thladiantha dubia, and is prescribed as a diuretic and laxative, and as a regulating remedy for female irregularities.

**TRITICUM REPENS.**—麥斛 (*Meh-huh*).—This plant, the Couch Grass of agriculturists, is described in the *Pen Ts‘au* in connection with the Dendrobium and other Orchidaceous epiphytes. The properties are not discriminated.

**TRITICUM VULGARE.**—小麥 (*Siau-meh*).—See *Wheat*.

**TRIUMFETTA.**—波羅麻 (*Po-lo-ma*).—There is quite as much evidence in favour of the fibre called by this Chinese name *Po-lo-ma* being the product of this Tiliaceous tree, as of the Corchorus, to which French authors assign it. See *Agave Americana*.

**TROLLIUS CHINENSIS.**—金蓮 (*Kin-lien*).—This Ranunculaceous plant, the Golden Lotus of Chinese writers, is met with in Tai chau in Shansi in great perfection. Its persistent, yellow flowers are fully described in the *Kwang-k‘iun-fang-pu*, but no reference is made to it in the *Pen Ts‘au*. It is inserted in TATARINOV's list of medicines, but is unknown in Hupeh.

**TULIP** (?)—光菇 (*Kwang-ku*).—These "smooth bulbs" resembling those of a Tulip, vary from half to three-quarters of an inch long. They are sharply pointed at one end, and vary in colour from a white to a buff colour. They are apparently prescribed in cases of carbuncle, abscesses, struma, chronic ulcers and sores in general.

**TURBETH MINERAL.**—See *Mercury, Nitrate of*.

**TURMERIC.**—薑黃 (*Kiang-hwang*).—The dried root-stocks of Curcuma longa are met with in the Chinese drug-market in hard, irregular, tuberculated pieces, of a light yellow colour externally, and internally varying in colour from orange to saffron-yellow. The smell is aromatic and the taste agreeable, with a bitterish after-taste. It is exported to India as the Chinese do not care much for it as a condiment. They employ it to some extent as a dye, and prescribe it in colic, congestions, amenorrhœa, deficient lochia, and as an external application to some intractable diseases of the skin. Dr. WARING advises inhalation of the fumes of burning turmeric in coryza, and approves of a decoction of turmeric (half an ounce of the bruised rhizome to ten ounces of water) as a wash for eyes suffering from catarrhal and purulent opthalmia.

**TURMERIC, GOLDEN.**—鬱金 (*Yuh-kin*).—The oblong, or ovate, bi-pointed tubers of a species of Curcuma, brought originally from *Ta-ts‘in kwoh*, were used in the preparation of the sacrificial libation called 鬯 (*Ch‘ang*). They were also brought from Persia. The tubers come from the south and west of China, Liu-chau fu in Kwangsi, being one of the places from which they are brought. They vary from three-quarters to one and a quarter inches in length, and are greyish-brown and more or less reticulated on the outer surface. On breaking one the hard, orange-yellow, translucent interior is seen to be divided into a central, and a cortical portion.

They are aromatic in smell and taste, and probably contain the same principles as the turmeric. They are used as a dye, in veterinary practice, and in much the same cases as the common turmeric. Tatarinov sets them down as belonging to another Scitamineous plant the Amomum. The *Pen Tsʻau* gives a separate account of what is called 鬱金香 (*Yuh-kin-hiang*), 草麝香 (*Tsʻau-shié-hiang*), 茶矩摩 (*Chʻa-kü-mo*) (Sanscrit) and several other designations, including that for both the Saffron and Safflower. It comes from Lo-ching hien in the northerly part of Kwangsi. Cophene (罽賓) formerly yielded it. The description is unintelligible. The plant is used as a scent, and is said to be employed in ink-perfumes. It is not procurable in Hankow.

**TURMERIC PAPER.**—薑黃紙 (*Kiang-hwang-chí*).—This test-paper for alkalies is easily made by steeping unsized paper in a Tincture of Turmeric, made by digesting one ounce and a half of bruised Turmeric-tubers in eight ounces of diluted spirit for a week. The colouring matter is very easily destroyed, alkalies turning it to a reddish-brown. It fades readily, but might be made the basis of other dyes.

**TURNIP.**—萊菔 (*Lai-fuh*), 紫花菘 (*Tsz,e-hwa-sung*).—The *Pen Tsʻau* describes under these terms the Brassica napus, or Turnip, and also the various sorts of Raphanus (Radish). The word 菘 (*Sung*), seems to be a book-word for the genus Brassica, and includes the common 白菜 (*Peh-tsuʻi*), or Cabbage. This name of *Sung* is given to the Turnip from its power of standing the frost, like the Coniferous trees. The roots, leaves and seeds are the subjects of several formulæ in the *Pen Tsʻau*.

**TURPENTINE.**—篤耨香油 (*Tuh-nau-hiang-yú*).—Frankincense, crude turpentine, and perhaps sandarac are referred to in the *Pen Tsʻau* under the name *Tuh-nau-hiang*, an exudation from Coniferous trees in Cambodia. Its production was assisted by heat. It was used as an application to pigmental alterations of the skin and moles, or mother's marks upon infants.

**TURTLE.**—See *Emys* and *Terrapin*.

**TURTLE-STONES.**—石鼈 (*Shih-pieh*).—These nodular, stony concretions, the Septaria of geologists, have some resemblance to the Emys, from the reticulations upon the surface. They are brought to Hankow from King-men-chau (Hupeh), and are believed to have some good effect, when powdered and taken in disorders of the urine.

**TUSSILAGO.**—See *Coltsfoot*.

**TUTENAGUE.**—山銅 (*Shan-tʻung*).—This word, more correctly applied to Chinese Spelter or Zinc, is derived from the Tamul words *Tantanagum* or *Tutum*, applied to Zinc, and its ores. The name is now applied to an alloy of copper and tin. See Waring, "*Pharm. of India*," page 358, and Williams' "*Chinese Commercial Guide*," 5th edition page, 116.

**TWINE.**—繩子 (*Shing-tsze*), 索 (*Soh*).—Very rough twine is made from the Böhmeria fibre. For use in dispensaries the common cotton thread (線) is serviceable. Foreign ligature-thread is called 麻線 (*Ma-sien*).

**TYPHA BUNGEANA.**—香蒲 (*Hiang-pʻu*).—This "scented flag" named by Tatarinov after Professor Bunge, a distinguished botanist who has treated of the Flora of North-China, is a kind of Bulrush not very different from the Typha latifolia of Europe, which is also found in the south of China. Its linear, reddish leaves are made into mats and fans, and the rhizomes (蒲蒻) furnish a meal which is made into cakes, and a vegetable, reputed to be cooling, tonic, diuretic and galactagogue. The stamens and pollen, mixed with the hairy sepals of the flowering spike are sold as a drug under the name of 蒲黃 (*P'u-hwang*). It is a yellow powder, tending to collect into balls, and inflammable to some extent, like lycopodium-powder. It requires sifting, and is then used as an astringent, styptic, sedative and desicccant remedy. It is also made into a confection for external and internal use.

## U

**ULMUS.**—See *Elm.*

**UMBILICUS MALACOPHYLLUS.**—昨葉何草 (*Tsoh-yeh ho-ts'au*), 瓦松 (*Wa-sung*), 屋遊 (*Uh-yü*).—This Crassulaceous plant, a kind of House-leek, or House-fir as the Chinese call it, is very common on the tops of old houses, rather rare things in China. It is credited with cooling, alterative, astringent, emmenagogue and lithontriptic qualities. Its juice is used to wash the hair, to apply to the bites of mad dogs, and to swellings, sores and wounds.

**UNCARIA GAMBIR.**—鈎藤 (*Tiau-t'ang*).—Short pieces (片) of this vine-like shrub, or those of the Uncaria procumbens, are brought from Honan, Shensi, Hunan, Hupeh and Kiangsi. Each piece is of a dark, or reddish-brown, colour and contains a node of some half to one inch in length, with two sharp, stiff, recurved, dried stipules, compared to fish-hooks by the Chinese. They have a faintly astringent taste, and are used in infantile diseases, such as chorea, febricula and apthæ. The permanent cirriferous branches of this tree adhering by these hooks to the trees over which it rambles, give a similar plant at the Cape of Good Hope, the name of Grapple-plant. A wine is made from these nodes of the Uncaria, which partakes of the properties of Tincture of Catechu.

**UNGUENTUM.**—搽藥 (*Ch'a-yoh*).—This character *Ch'a* is variously written to express an ointment, a kind of remedy not so much used at the present time as formerly. Ointments of litharge, hellebore, soot, bulrush-pollen and many inert substances are directed in the *Pen Ts'au* to be made with lard. Plasters take the place of ointments in Chinese surgical practice, the heat of the climate rendering such compounds almost useless during a long period of the year. Benzoated lard, or lard mixed with insect-wax should always be used in summer to make up ointments.

**UREA.**—秋石 (*Ts'iu-shih*).—This substance, mixed with lithates, phosphates, hippuric acid and the other constituents of the urine of young children, is obtained by boiling down the urine, mixed with salt or a little sulphate of lime to hasten the crystallization. It is met with in small cakes, crystalline, deliquescent and evidently moulded in little cups. It is salt to the taste, and contains much common salt. Other additions are made to it, such as autumnal dew, whence it receives its name "autumnal stone." This substance is given in debility, gonorrhœa, blenorrhœa, renal, vesical and uterine complaints. It is often kept in Chinese kitchens to soften fresh meat required for immediate use. It is brought to Hupeh from Ngan-king-fu and Chi-chau-fu in Nganhwui province.

**URSUS**.—See *Bear-gall.*

**URTICA DIOICA**.—蕁 麻 (*Sin-ma*).—The stinging properties of this and similar species of Nettle, which are generally classed with the hemp-plants, are well-known. They are used to poison fish by throwing the plants into the streams. The herb is said to allay vomiting, and the juice is applied to snake-bites and herpetic eruptions.

**URTICA SCORPIONIDES**.—蝎 子 草 (*Hich-tsze-ts'au*).—This plant is not found in the *Pen Ts'au*, but is described as formidable to all animals except camels, from the violence of its stings. See *Kwang-k'iun-fang-pu.*

**URTICA TUBEROSA**.—赤 麻 (*Ch'ih-ma*), 天 麻 (*T'ien-ma*).—The shoots and tubers of this Nettle are eaten by the Chinese, triumphant in all parts of the vegetable kingdom. The plant is prescribed in rheumatism, neuralgia, palsy and lumbago. The dried shrivelled tubers of this plant are met with in Hankow in the form of flat, yellowish-brown pieces, irregularly oblong, and measuring from two to two inches and a half long, by one inch and a half broad. The names of this plant are given to the Leonurus.

**UVULARIA GRANDIFLORA**.—貝 母 (*Pei-mu*), 莔 (*Hiang* or *Ming*).—The researches of HOFFMAN and SCHULTES prove that one of the several plants going by these names is the Uvularia, a Melanthaceous plant. Two kinds are met with in commerce. A larger corm, of the size of a marble, is much cultivated near Ningpo, according to Mr. BOWRA. This sells at a much lower price. This kind is grown in Siang-yang fu and King-chau fu in Hupeh. The Sech'uen variety (川 貝 母) is much dearer, and is of recent date. The corms are dug up in the early autumn, and in spring, so that this difference in the time of gathering this "mother-of-pearls," as the Chinese call the corms, may account for the various sizes. The Sech'uen corms are naked, of a white, or yellow, colour, and may be easily broken into two or more segments, disclosing the central shoot. They vary in size from that of a small pea to the bigness of a small marble. They are easily crushed by the teeth to a white, starchy and almost tasteless powder. The Chinese give them in fevers, coughs, dysuria, hæmorrhages, deficiency of milk, threatened mammary abscess, lingering labour, rheumatism and diseases of the eye. This drug is perhaps identical with the Hermodactyl of the ancients, and may include the Colchicum variegatum which M. PLANCHON gives as the source of the Hermodactyl.

## V

**VALERIANA**.—甘 松 (*Kan-sung*).—The rhizomes of a kind of Valerian are met with in Hankow having the same name as the Spikenard, and appear to come from Sech'uen and Shensi. They are covered with dried, reddish-brown leaves, and have a mass of matted rootlets attached to them. The taste is bitter, and the odour faint and not unpleasant. They are officinal as a carminative, cordial, tonic and deodorizing drug. It is inhaled in phthisis, and reckoned to be good for gout and swellings of the feet.

**VERATRUM NIGRUM.**—藜 蘆 (*Li-lü*).—A drug, consisting of the rootstock terminated with the radicles, and embraced by a bundle of hairy, coir-like fibres, has been identified by TATARINOV as Black Hellebore (Melanthaceæ). It is known to the Chinese as an acrid poison, having errhine, emetic, expectorant, evacuant and anthelmintic effects. It is given in apoplexy as a rousing emetic, and as an ointment for itch and tetters.

**VERBENA OFFICINALIS.**—馬 鞭 草 (*Ma-pien-ts'au*).—A weed as common in China as in England, and called "horse-whip plant," from the long, spiked inflorescence, after the fall of the deciduous corollas. It is confounded by the country-people with the Leonurus, from its similar square stems. It is assumed to act on the blood, relieving congestions, obstructions, dropsical effusions and hæmatoceles, and is also credited with emmenagogue, anthelmintic and anti-scorbutic properties. The root is set down as astringent.

**VERDIGRIS.**—銅 靑 (*T'ung-ts'ing*), 銅 綠 (*T'ung-luh*).—This substance is confounded by the Chinese with Verditer, a carbonate of copper. Verdigris, a basic acetate of copper, is made by sprinkling vinegar upon copper, or it is scraped from copper cooking vessels. It is used as a vomit, in the treatment of hepatic diseases, to kill pediculi, and to apply to syphilitic sores and snake-bites. It is employed in making paints, and to preserve wood lying in water.

**VERDITER.**—銅 綠 (*T'ung-luh*).—This substance, confounded and often adulterated with Verdigris, is an artificial carbonate of copper, extensively adulterated or mixed with some vegetable menstruum. It is sold in small, opaque, friable, rhombic or rectangular, thin cakes, of a greenish colour on the upper surface, and of a greyish-white on the under surface. It is used as an astringent, alterative, anthelmintic, emetic, vulnerary, escharotic and detergent medicine. It is employed in the treatment of ophthalmic and cutaneous diseases. It is used to mix with green dyes, or as a cheap substitute for them.

**VERMICELLI.**—粉 絲 (*Fen-sze*).—The Chinese make coarse kinds of vermicelli, or *loksoy*, from rice flour, and they are used by both natives and foreigners in making soups. The 銀 絲 (*Yin-sze*), or "silver threads" are vermicelli threads made from wheaten dough, drawn out on a frame and dried in the sun. They are eaten on the first and fifteenth days of each month, called 朔 (*Soh*), and 望 (*Wang*), the Sundays of the Chinese.

**VERMILION.**—銀 朱 (*Yin-chü*), 紫 粉 霜 (*Tsze-fen-shwang*).—This beautiful substance, the sulphide of mercury, is ordered to be made by mixing together two catties of red sulphur and one catty of mercury, and subliming the mixture. The crystalline sublimate on the cover of the alembic is called cinnabar, whilst that on the sides is the vermilion. These bright red, or dark-orange, acicular crystals are carefully powdered, levigated, decanted and dried upon tiles, and then sifted, sorted and packed in glazed black paper in quantities of about an ounce. The more patiently and thoroughly the vermilion is ground, the more beautiful is the red colour. This article is regularly exported to England, in boxes of some fifty catties, selling at an advance of some 25 per cent. upon the current cost of mercury, according to Dr. WILLIAMS. Fuhkien vermilion is the best. Tai-p'ing fu in Nganhwui and Yung-nan fu in Yunnan yield large quantities, according to Chinese account, and Hankow supplies an inferior quality.

It is apt to be adulterated with minium and sesquioxyde of iron. It has much the same medicinal properties as the cinnabar, and is believed to be stronger than calomel. It is recommended as a fumigation to be breathed by syphilitic sufferers, and enters into several formulæ for external and internal use. The paper in which vermilion is packed is said to be a remedy for lice on the head, which is to be fumigated with its smoke. Large quantities are used for colouring candles and paper, for stamping and writing purposes, and in the making of varnishes.

**VIBURNUM OPULUS.**—雪 球 (*Siueh-k‘iu*).—This "snow-ball" plant is mentioned in the K. K. F. P. but is not used medicinally. Known in England as the Guelres Rose, this Caprifoliaceous ornamental shrub is confounded in China with the Hydrangea. The leaves are said to be emetic and drastic (LINDLEY).

**VICIA SATIVA.**—綠 豆 (*Luh-tau*).—The common vetch is known by this name in Hankow. TATARINOV refers the *Luh-tau* to a Phaseolus, and the description in the *Pen Ts‘au* agrees with it. A favourite article of confectionary, eaten particularly in the fifth month, is called 綠 豆 糕 (*Luh-tau-kau*). See *Phaseolus angulatus.*

**VINEGAR.**—醋 (*Ts‘u*), 醲 (*Nung*).—A very strong and nauseous vinegar is made from rice by boiling it, and keeping it to ferment in a vessel in a warm place for several days. Stale and very strong rice-vinegar is directed to be used in medicine, but it is really prepared from grain of all kinds. Peach-vinegar was formerly made in China. Vinegar is believed to spoil the teeth, and to make people thin. The reviving effects of the fumes of vinegar, as in parturition, are understood by the Chinese. It is believed to be cooling, astringent, antidotal, alterative, stomachic, anti-emetic and discutient. Its corrective and condimental uses are referred to in the *Pen Ts‘au.* It is the only acid with which they have any definite acquantance. It is accordingly used in all chemical processes as a solvent or oxidyzing agent.

**VIOLET.**—紫 金 花 (*Tsz‘e-kin-hwa*).—The dog-violet and the scented violet grow in China, but they appear to have no medicinal use, nor do they seem to excite much admiration. No reference to the violet has been come across in the pages of the *Pen Ts‘au.*

**VISCUM.**—木 斛 (*Muh-huh*).—Loranthaceous plants, growing as parasites upon large trees, are sold indiscriminately with bunches of the dried yellow branches of the Dendrobium, an Orchid. See *Mistletoe* and *Willow-epiphyte.*

**VITEX INCISA.**—蔓 荊 (*Man-king*).—The fruit of this scandent Verbenaceous shrub are brought from Pehchihli, Honan, Shensi and Chehkiang. The berries are globular, black, nucumentaceous, about two or three lines in diameter, and usually covered with the remains of the calyx, or mixed with the dried leaves of the plant. The interior is white, ligneous and made up of four carpels in a state of adhesion. They have little taste or smell, and must be very nearly inert, as sold in Hankow. They are prescribed in headache, catarrh and watery eye, and are said to promote the growth of the beard, that great object of the middle life of every Chinaman. The Vitex Negundo and the Vitex trifolia are extensively used in Indian native medical practice. See *Ph. of India*, page 163.

**VOLCANIC AMMONIA.**—北 庭 砂 (*Peh-ting-sha*).—There is an ammoniacal salt said in the *Pen Ts‘au* to be brought from Turfan or Kansuh, which is probably the one referred to by Kefferstein as a carbonate of ammonia. See *Sal Ammoniac.*

## W

**WALNUT.**—胡桃 (*Hu-t'au*), 核桃 (*Heh-t'au*), 羌桃 (*Kiang-t'au*).—This tree, the Juglans regia of botanists, was one of the good things brought from Turkestan by Chang K'ien of the Han dynasty. The tree flourishes in Ho-nan-fu and K'ai-fung-fu in Honan, and in Shensi and the northern provinces. The fruit is regarded as not very wholesome, but having wonderful effects upon the blood, lungs and kidneys. The pericarp seems to have furnished an oily juice used to darken the hair and beard. The bark, the root-bark and the hard shells are used as astringents.

**WATER.**—水 (*Shwui*), 玉液 (*Yuh-yih*).—Whilst water is consigned by us to the laboratory of the chemist, or to the care of the hygeist, the Chinese Pharmacopœia, or *Pen Ts'au*, places it in the very forefront of all medicinal agents, and discusses very elaborately all its conditions and uses. It is the first of the sixteen great classes of all known substances, and is divided into the cellestial and terrestrial descriptions, of which there are made thirteen and thirty different sorts respectively. The hydropathic system seems to have been in vogue in the time of the great Han surgeon, Hwa-to, who practised the cold douche in a regular form. The hæmostatic power of water is described, and the power to check vomiting and uterine flooding is insisted upon. Cold compresses placed on the chest to excite breathing in cases of poisoning by carbonic acid and in drunkenness, and cold douches for the eyes are intelligently described. Its use in skin-diseases, now unhappily obsolete, is also enjoined. Hot water is often drunk by the Chinese, apart from considerations of economy, medicinally as an antidote, or as a diluent, leniture, laxative, demulcent, solvent, lithontriptic, deobstruent, stimulant, diaphoretic and diuretic agent, in which they have deliberate and intelligent confidence. Sea-water is recommended in the *Pen Ts'au* to be sparingly drunk, and to be used as a bath in scaly eruptions.

**WATER OF THE FIVE METALS.**—五寶湯 (*Wu-pau-t'ang*).—The water in which the "five precious metals," gold, silver, copper, iron and tin, have been hastily boiled, is a popular remedy for domestic emergencies. such as faintness and accidents of any kind. Personal ornaments and a medley of articles generally make up the required combination of materials. The dose is quite as serviceable as the bad brandy swallowed in all such catastrophes at home.

**WATER CALTROPS.**—See *Trapa bicornis.*

**WATER CRESS.**—水芹菜 (*Shwui-k'in-ts'ai*).—See *Celery.* The common Parsley, called 胡菜 (*Hu-ts'ai*) and 香菜 (*Hiang-ts'ai*), is largely consumed as a vegetable by the Chinese, who cook it root and all.

**WATER DROPWORT.**—See *Polygonum hydropiper.*

**WATER LILY.**—See *Lotus.*

**WAX, INSECT.**—See *Insect Wax.*

**WAX, JAPAN.**—日本蠟 (*Jih-pen-lah*).—This is a vegetable wax obtained according to Dr. Williams, "by crushing the ripe seeds, and then separating the tallow-like covering by heat." It is inferior to bees-wax, and much less valuable than the Chinese insect-wax, but is a regular export from Japan to China and other countries. It consists principally of tripal mitine.

**WAX, VEGETABLE.**—樹蠟 (*Shü-lah*).—See *Insect Wax*, *Japan Wax* and *Wax-tree.*

**WAX, WHITE.**—白蠟 (*Peh-lah*)—By this term the Insect Wax is always understood by the Chinese, who generally drop the character for insect (蟲). Bees-wax is called 蜜蠟 (*Mih-lah*), and was the usual source of white wax up to the end of the *T'ang* time. In the time of the Mongolian emperors, who gave a stimulus to all the enterprises of the country by lightening the taxes and increasing the means of inter-communication, the insect-wax hitherto regarded as the worthless dung of the insect began to be utilized. White bees-wax, never very white as made in China, should be distinguished as 白蜜蠟 (*Peh-mih-lah*). A draught of the yolks of eggs, asse's glue, sugar and purified wax was a remedy for diarrhœa, dysentery and uterine hæmorrhage. Pills of wax were an old presciption in coughs and affections of the lung in general.

**WAX, YELLOW.**—黃蠟 (*Hwang-lah*).—Ordinary bees-wax is brought from Kiung-chau fu in the island of Hainan, from Sze-ching fu and Chin-ngan fu in Kwangsi, Shau-wu fu in Fuhkien, Sze-chau fu and T'ung-jin fu in Kweichau, Pau-king fu and Yung-shun fu in Hunan, Siau chau in Shansi, and from Han-chung fu and Sui-teh chau in Shensi. The wax is melted into large cakes called 磚蠟 (*Chuen-lah*), or Brick Wax. Dr. Williams say sthat bees-wax is imported from the Indian Archipelago to China. Large quantities are used in coating pills to preserve them, in candle-making and in preparing red and black discs for taking impressions of card-boards and small rubbings of blocks. Plasters and ointments directed in the *Pen Ts'au* for application to wounds, sores, whitlows and chilblains are not much used at the present time. Bees were formerly given as a remedy in leprosy. Honey-comb (蜂房) was formerly officinal.

**WAX-TREES.**—冬青 (*Tung-ts'ing*).—This is a descriptive and comprehensive term applied to certain evergreen Oleaceous trees which harbour the wax-insect. The tree commonly known by this name, or by that of 蠟樹 (*Lah-shu*), is the Ligustrum lucidum. It is a handsome evergreen tree, with ovate-pointed leaves, profuse white flowers in paincled cymes, and bearing a black, capsular fruit. It would make a capital addition to our English shrubberies. The fruit and bark are used in the form of a tincture in rheumatism, and the leaves are applied to swellings and sores. The wax-insect is certainly bred upon the tree. This term of *Tung ts'ing* is also loosely applied to another tree or trees, the 女貞 (*Nu-ching*), a name referred by Hoffman and Schultes to Ligustrum Japonicum and also to Ligustrum obtusifolium. The Rhus succedaneum is called *Nu-ching*, by Tatarinov, but nothing is known here to confirm this identification. The *Nu-ching* is officinal in debility, rheumatism and lumbago, all very common complaints in Hupeh. The wax-insect is largely raised on this tree in Sech'uen. 水蠟樹(*Shwui-lah-shü*), is a name of a tree affected by the wax-insect, and referred by Hoffman and Schultes to Ligustrum Ibota. This tree, judging from native accounts, should be an Ulmus.

JULIEN suggests that another tree called 水冬青 (*Shwui-tung-ts'ing*), is some sort of Hibiscus. There is a tree called 甜櫧 (*T'ien-chü*), a native of Kiangnan, producing excellent timber, and harbouring the wax-insect, which may be a species, of Ornus or Fraxinus. It is also called 鉤栗 (*Kau-lih*), or 鉤櫟 (*Kau-lih*), in the *Pen Ts'au*. The Holly-tree (刺樹), the 水橘樹 (*Shwui-kiuh-shü*), or "water-orange tree, and the 碗芝花 (*Yuen-chi-hwa*), are mentioned by Mr. WYLIE, in a note contained in his Sech'uen itinerary published in the "Transactions of the North China Branch of the Royal Asiatic Society" for 1868, as affording shelter and food for the wax-insect.

**WHALE.**—鯨 (*King*), 鯢 (*I'*), 吉弔 (*Kih-tiau*).—Several marine animals, very like a whale, are described under the head of the Dragon, or amongst Fishes. *King* and *I'* appear to denote the male and female whale respectively. The *Kih-tiau*, a name singularly like the Greek word for a sea-monster, now applied to the Cetacea, is described in connexion with the account of ambergris, which is variously described, under the names of 吉弔脂 (*Kih-tiau-chi*), 龍涎 (*Luny-sien*), as the spittle, or sperm, of the dragon or some great fish in the ocean, out of whose belly it is taken. This *Kih-tiau* is said to have the head of a serpent and the body of a turtle, with a good deal of fat, which some sort of leech is described as robbing it of. The beast appears to have frequented the coast of Fuhkien. The seal is evidently referred to in the description of some of these queer creatures. See *Dragon's Spittle* and *Spermaceti*.

**WHEAT.**—小麥 (*Siau-met*), 來 (*Lai*), 䅘 (*Lai*).—The old Chinese writers speak of this grain as the auspicious gift of heaven, and endeavour to perceive some resemblance between the characters and the spikelets of the ears of wheat, the "downcome" of heaven. The learned compiler of the *Pen Ts'au* gives 迦師錯 (*Kia-sze-tsu*), as the Chinese transliteration of the Sanscrit or Pali name for wheat. The grain is sown in winter as a rule, although a spring-crop is occasionally heard of. In the provinces of Honan, Shensi, Shansi, Shantung and Pehchihli wheat is very extensively raised. Wheat is sown broadcast in the north, but in the more southerly provinces, where an inferior grain can only be raised, the seed is more thickly sown to produce a precarious crop. From expressions in Chinese works, and from the name 大麥 (*Ta-meh*), given to barley, it seems to follow that wheat came into the importance which it universally enjoys as at the present time, at a late period. Setting aside the story of the heavenly origin of this excellent grain, it may be assumed that barley, or rye (included by Dr. SCHLEGEL under the name of *Lai*) has been longer known in Shensi, the original home of the Chinese, than wheat which "came" to them from elsewhere. It is asserted in the *Pen Ts'au* that if the Xanthium strumaruim be cut up and dried, and mixed with wheat, it will not suffer from weevils. Wheat is regarded as nourishing, but heating in its nature. It is recommended as a diuretic, demulcent and anti-hæmorrhagic drug. One writer quoted in the *Pen Ts'au* wisely adds that wheat makes women fertile. Much more of this grain is consumed by the Chinese all over the country than is commonly believed by foreigners.

**WHEATEN FLOUR.**—灰麪 (*Hwui-mien*), 白麪 (*Peh-mien*), 麪粉 (*Mien-fen*).—Wheaten meal is described as slightly deleterious in the *Pen Ts'au*. Flour hung up for several years in an airy place is said to lose this injurious quality, and to be suitable for medicinal purposes. Wheat is ground by rude hand-stones of the most primitive character, in some parts of China. In large towns the millers, an important calling, employ the yellow cow to grind over and over again the wheat, which yields a coarse flour. The 三道麪 (*San-tau-mien*), or "three-way-flour," may be used very well as a substitute for foreign flour. LI SHI-CHIN argues that the quality of flour must depend very much upon the climate in which the wheat grows. Bread or dough pills effect wonders in relieving night-sweats, and hæmorrhages and fluxes are remedied by baked flour, according to writers quoted in the *Pen Ts'au*. See *Bread*.

**WHEATEN STARCH.**—麪粉 (*Mien-fen*).—Under this name, often improperly applied (in which case it is a redundancy) to the flour of wheat, the *Pen Ts'au* gives the starch prepared from bran or flour by washing and separation. This was formerly much used to stiffen clothes. It is recommended to be parched and made into a poultice with vinegar, to be applied to all sorts of swellings.

**WHIN.**—金雀花 (*Kin-tsioh-hwa*).—The same confusion between the genera Ulex and Genista occurs in the "K. K. F. P." as in the popular botany of England. See *Broom*.

**WHISKEY.**—See *Spirit*. A kind of whiskey, called 汾酒 (*Fen-tsiu*), comes from Fen-chau-fu in Shansi, and is much liked in Hupeh and elsewhere. It serves to make tinctures.

**WHITE LEAD.**—白粉 (*Peh-fen*), 粉鉛 (*Fen-yuen*), 粉錫 (*Fen-sih*), 胡粉 (*Hu-fen*), 光粉 (*Kwang-fen*), 水粉 (*Shwui-fen*), 官粉 (*Kwan-fen*), 鉛粉 (*Yuen-fen*).—Several other synonymes of this carbonate of lead, long made and used by the Chinese as a pigmental and cosmetic substance, are met with in the *Pen Ts'au*. The word *Hu* does not denote that the substance was formerly obtained from some foreign source, but is the result of a mistaken character. To make it a hundred catties of lead are melted and run into thin sheets, which are further rolled into rough tubes. These tubes are packed into a large wooden vessel containing a quantity of vinegar in a separate vase. The vessel is luted down with a mixture of salt and mud, laid upon a surface of paper covering its mouth. The vessel is then heated by placing it in a kang with warm ashes. The lead is slowly acted upon for a week by the vinegar, the heat being kept up, and the tubes are found almost entirely converted into a carbonate of lead, the acetic acid of the vinegar merely acting as an intermediate or disposing agent. Any lead left over is made into massicot or minium by exposure to heat in a furnace. Shinchau in the western part of Hunan, formerly a great place for chemicals, used to yield the best white lead. Nanking yielded a good lead in the *Ming* time. Shau-chau-fu and Canton in Canton province, P'ing-loh-fu in Kwangsi, Hang-chau-fu in Cheh-kiang, Ta-ming-fu in Pehchihli and places in Yunnan yield good white lead. The Chinese carefully grind and elutriate their white lead and it appears to have a good body, but it soon tarnishes from the presence of hydrate of lead and adulterating additions. The poisonous effects of this salt are well pointed out in the *Pen Ts'au*. Astringent, peptic, anthelmintic and other properties, depending upon the addition of foreign substances, are attributed to it. Plasters, liniments and ointments for sores, burns, carbuncles, &c., are directed in old Chinese works. See *Lead, Acetate of*, and *Marble, Levigated*.

**WILLOWS.**—楊柳 (*Yang-liu*).—This indefinite name for a number of trees, exceedingly common in Hupeh, is the result of a conjunction of the word *Yang*, originally given to the spreading species of Salix, with the word *Liu* belonging to the drooping, long-leaved species. It is also necessary to note that the genera of Populus, Salix and Tamarix are all confused together. 木楊 (*Muh-yang*) indicates the Salix pentandra. A very large tree of the Willow kind is called 櫸柳 (*Kü-liu*). Its wood is much used for making boxes, and the bark is given in general dropsy, dysentery and abdominal disorders. The 赤楊 (*Chʻih-yang*), or Red Willow is the Tamarix, named sometimes after the goddess *Kwan-yin*. 水楊 (*Shwui-yang*), or 青楊 (*Tsʻing-yang*), has leaves like the Salix pentandra, and the branches were anciently used to make arrows. The leaves, bark and the root-bark are prescribed as remedies for wounds, sores, carbuncles and mammary abscesses. The 白楊 (*Peh-yang*), or Salix alba grows well in the north, and is said to be tremulous, like the Aspen. Its bark is said to benefit goitre, dysentery, rheumatism and all sorts of bruises and fractures. The leaves of this and other Willow-trees are often eaten by poor people in times of want. A kind of tea, called 甜茶 (*Tʻien-chʻa*), was, and is still, made from the leaves of the Salix alba and other kinds of Willow. In Shanghai these leaves are openly prepared to mix with tea-leaf for the foreign market.

**WILLOW-EPIPHYTE.**—柳寄生 (*Liu-ki-sang*).—This is a species of Viscum met with on the Willow. The dried, yellow, flowering plant is sold in the shops, with the leaves attached. It is used as a carminative, antispasmodic and sedative.

**WINES.**—酒 (*Tsiu*).—The wines of China are crude spirituous liquors, almost altogether unrefined, being distilled from rice, millet, barley and all sorts of fermented grain. There is a prejudice against grape-wine, as it was originally brought from certain volcanic districts in Turfan, and therefore held to be heating and injurious. Distilling wines and spirits seems to have been perfected in the Mongolian dynasty. Wine flavoured with sandal-wood, brought from Siam, was formerly in great repute. 紹興酒 (*Shau-hing-tsiu*), the celebrated Chehkiang wine, is a wholesome wine, sour in flavour, yellowish in colour, and in the greatest repute all over the empire. 芫花酒 (*Yuen-hwa-tsiu*), is a weak, white wine or spirit, flavoured with the flowers of the Passerina chamædaphne, reputed to be tonic. 歸元酒 (*Kwei-yuen-tsiu*), is a red wine. 碧綠酒 (*Pih-luh-tsiu*), is a greenish cordial wine, or spirit, brought from Pehchihli, but often made in Hupeh. 汾酒 (*Fen-tsiu*), is a kind of strong whiskey, brought originally from Fen-chau-fu in Shansi. The wines of China are taken warm, very soon redden the face, and culminate in evanescent stimulation. The Chinese drink a fair quantity of wine in the cold weather, but are seldom addicted to drunkenness. Liver-diseases are far from frequent in Hupeh.

**WOOD.**—See *Indigo.*

**WOLFSBANE.**—狼毒 (*Lang-tuh*).—A tap-shaped, or napiform, root is met with in Chinese shops, the name of which means literally Wolf's Bane. It is used as a sedative, and is exceedingly poisonous. The roots are large and starchy, and are often much worm-eaten. It is possibly the Aconitum Lycoctonum of botanists.

**WOOD-ASHES.**—竈灰 (*Tsau-hwui*).—This is a domestic article, as common in Chinese villages as in English homesteads. As reeds, wood and straw are only used in country-places as fuel, the lye resulting from the solution of the ashes is mainly a carbonate of potash. It is used as a detergent remedy in disorders of the skin and hair, in domestic bread-making and in treating hemp-fibres.

**WOOD OIL.**—桐子油 (*Tʻung-tsze-yu*), 秀油 (*Siu-yu*).—Wood Oil is met with in Hupeh in two forms. One the cold-drawn, is much paler and thinner, and is used for lamps, and for varnishing furniture and the better class of umbrellas. This is sometimes called 白桐油 (*Peh-tʻung-yu*). The thicker, darker oil, called *Siu-yu* is obtained by heat and pressure from the seeds, or fruits, of the same trees, the Elœococcus and the Jatropha. It is used in making putty, and in caulking and painting ships and boats. There is a reddish kind, called 紅桐油 (*Hung-tʻung-yu*). The best Wood Oil comes to Hankow from Shin-chau fu in Hunan. This oil is given as a remedy in insanity, and in cases of metallic poisoning. It is emetic, acro-narcotic and drastic, proving destructive to rats in a very short time. It is applied as a stimulant to carbuncles, ulcers, burns, swellings and bruises, and is a constant ingredient in native plasters. It was forbidden to be exported from Hunan and Hupeh during the Taiping rebellion, as it is a necessary article for ship-yards.

**WOOD SORREL.**—See *Oxalis acetosella.*

**WOOL.**—羊毛 (*Yang-mau*).—The wool of the sheep and that of the camel were for a time exported from Tʻientsin, the supply from Shansi, Pehchihli and the north of China being very considerable. Foreigners interested have derived little if any profit from their enterprises. The Chinese make excellent felt hats, rugs, tent-coverings and other coarse articles of protection. Cloth is however beyond their power.

**WORMWOOD.**—See *Artemisia.*

## X

**XANTHIUM STRUMARIUM.**—葈耳 (*Si-rh*), 蒼耳 (*Tsʻang-rh*).—This common Composite plant, the fruit of which is variously compared to the ears of women and pigs, has some sixteen names. It appears to have been brought on the fleeces of sheep driven into China from the north. The burs of this weed, armed with recurved prickles, are gathered by Chinese herbalists, and used as tonic, anti-strumous, anti-rheumatic, antiperiodic and diuretic remedies. Formerly a kind of flour was made from the seeds, which also yielded a lamp-oil. The leaves and shoots are eaten as a vegetable, and given in fevers, apoplexy, catarrh, rheumatism and leprosy. An extract prepared from the roots and leaves was a grand remedy for ulcers, cancers, carbuncles, sores and wounds. The flowers are also officinal, and so are certain insects harbouring in the plant. This plant was formerly officinal in Europe.

**XANTHOCERAS SORBIFOLIA.**—文光果 (*Wan-kwang-kwo*).—This beautiful Sapindaceous flowering tree, described by Prof. Bunge as common in Peking and North China, is put down by the authors of the *Pen Tsʻau* amongst the Fig-trees or "flowerless fruits." It is said to be common in King chau (Pehchihli), and its fruit, resembling the 栗 (*Lih*) in taste, to ripen in the fifth (Chinese) month. Dr. BRETSCHNEIDER gives 文王菓 (*Wan-wang-kwo*) as the common name of this magnificent tree, as it grows in Peking.

**XANTHOXYLUM ALATUM.**—秦椒 (*Ts'in-tsiau*), 花椒 (*Hwa-tsiau*), 川椒 (*Ch'uen-tsiau*).—The fruits of this native Pepper-wort, originally brought from Shensi, consist of the small, red, tuberculated carpels, enclosing the round, black, shining seed. By abortion the carpels, normally four in number, are reduced by two, and the slender pedicles are as often mixed up with the dehisced carpels (in the Chinese samples) attached to the carpels. The drug has an aromatic odour, and a peculiar, pungent, and terebinthinate flavour, with a benumbing, acrid after-taste, faintly resembling that of aconite. The properties which render it condimental and medicinal are probably due to the oleo-resin of the tubercles of the pericarp. They come from Mau-chau and Sü-chau-fu in Sech'uen, and Sze-nan-fu in Hupeh yields the plant. The leaves are also collected and used, with the fruits, as stimulants, carminatives, sudorifics, emmenagogues, astringents and anthelmintics. Silkworms are largely fed upon the leaves. The Sech'uen variety, or species, sometimes called 蜀椒 (*Shuh-tsiau*), or 川椒 (*Ch'uen-tsiau*), is brought from Kwei-chau-fu and other places in Sech'uen. The description best suits the Xanthoxylum hastile. Judging from the account of the stronger qualities of the jet-black seeds, this is probably the *Faghureh* of AVICENNA, the Fagara piperita of books.

**XANTHOXYLUM PIPERITUM.**—吳茱萸 (*Wu-chü-yü*).—The fruits and flower-stalks of this Pepper-wort, are brought from Jú-ning-fu in Honan, Sze-nan-fu in Kwei-chau, and Tang-chau-fu in Shantung. It is common too in Japan. The small black carpels are usually separated from their pedicles, five in number, closely connected, and mixed with the scabrous stalks of the umbellate inflorescence. They have a warm, bitter and aromatic flavour. They are used as stimulant, carminative, stomachic, deobstruent, astringent and anthelmintic remedies. All these Xanthoxylums are worth trial in catarrh, quinsey and rheumatism. They do not belong to the Piperaceous order proper, but all nations have agreed to indicate their relation to that order by giving them a similar name. They are common in India, and are used in much the same cases as in China. Dr. STENHOUSE has found in Xanthoxylum alatum an essential oil, and a stearoptene, or camphor. See *Pharmacopœia of India*, page 48. Tea is often made of these seeds of Pepper-worts in Hupeh.

## Y

**YAK.**—犛牛 (*Yu-niu*).—This animal, the Bos grunniens, or Poëphagus grunniens, of naturalists, is remarkable for its long bushy tail, its grunting noise and its long hairy coat. It is found in Central Asia, Thibet and Mongolia, and was observed by MARCO POLO. Dr. BRETSCHNEIDER says in the fourth number of the fourth volume of the Chinese "Notes and Queries," that "they are mentioned quite early as existing amongst the highlands of Thibet and Mongolia, where they are still tamed, and represent a valuable domestic animal, that requires no care, and is able to withstand by means of his long-haired coat the intensest cold in the open air. The Yak thrives well in the southern part of Eastern Siberia. The hybrid from

Bos taurus (masc.) and Bos gruniens (fem.) furnishes excellent flesh, and large herds of these animals are driven on this account to Irkutsk, the capital of Eastern Siberia." The milk is very rich, and the flesh very delicate eating.

**YAM.**—甘藷 (*Kan-chü*), 藷蕷 (*Chü-yü*).—The edible tubers of Dioscorea sativa and other species of this genus are to be distinguished from the Taro. These tubers are a prime article of food in Hupeh, Hunan and some other provinces. There are white and red tubers sold in Hupeh. Thin slices are sold in the streets of Hankow to be eaten raw by the feverish slave of the opium-pipe. See *Dioscorea.*

**YEAST.**—酵 (*Kiau*).—See *Leaven.*

**YELLOW OCHRE.**—黃土 (*Hwang-t‘u*).—Yellow ochreous clays or loams are described in the *Pen Ts‘au* as remedies, which when mixed with vinegar or wine are applied to wounds, burns, scalds and eruptions. The finest kinds of these clays, some containing iron, are used as pigments, or for fulling purposes. As remarked by Dr. Dudgeon this powdered loam, or lœss, is sometimes applied in conjunction with some aromatic ingredient to sores in a way which reminds one of the "dry-earth-system" of disinfection. Antidotal properties are referred to this ochre, which is also an ingredient in collyria, or eye-washes. A yellow clay is brought from Yoh-chau fu (Hunan) to Wuchang, for the purpose of mixing it with prepared tobacco, to give it colour and weight.

## Z

**ZANTHOXYLUM.**—See *Xanthoxylum.*

**ZEDOARY.**—天竺乾薑 (*T‘ien-chuh-kan-kiang*).—The yellow rhizome of this "Indian dry ginger," mentioned in the *Pen Ts‘au*, is probably the Zingiber Cassumunar, or the Curcuma Zedoaria, of Roxburgh, used in China and India as a carminative remedy in indigestion and dysentery, and in lumbago.

**ZINC.**—白鉛 (*Peh-yuen*), 白銅 (*Peh-t‘ung*).—Zinc, or spelter, is not carefully distinguished from tin, lead, antimony and pewter, with other alloys of these metals. Persian zinc, preparations from the oxide of which, named *tutia*, have been long known in the East, is alluded to in the *Pen Ts‘au*. It is met with in thick plates of a whiteish-blue colour, brittle, lamellated and crystalline in structure. It is used in the casting of guns, and in the making of shot, and is therefore retained as a monopoly of the Chinese government. Large quantities come from Yung-chang fu in Yunnan (according to native official returns), and much is exported from Hankow to Chinkiang and Shanghai. Kweichau province contains what are probably mines of zinc. Spelter instead of being exported to India, as it was formerly, appears in Dr. Williams' list of Imports. The astringent properties of zinc are not satisfactorily understood by Chinese writers, who are more familiar with calmine, one of the sources of brass. See *Tutenague.*

**ZINC, OXYDE OF.**—白鉛丹 (*Peh-yuen-tan*).—This coined name for *tutty* or *tutia*, a name for the white oxyde, or flowers, of zinc, derived from the Tamul word *Tutum*, is new to the Chinese, who use the impure carbonate (calamine). The word *Tan* stands for an oxide or sulphide, and may be of any colour, as well as red.

**ZINC, SULPHATE OF.**—黃礬 (*Hwang-fan*).—This crystalline, impure sulphate of zinc, as it seems to have been, came from Persia, as well as from places in Kansuh and Shensi. It was only used externally as an astringent wash or ointment, to be applied to running ears, condylomata and other sores. 鉛礬 (*Yuen-fan*), a name occurring in the article in the *Pen Ps'au* on alum, would be a good name for sulphate of Zinc, if there were not a suspicion that this was an iron-alum. 白鉛礬 (*Pen-yuen-fan*), would also suit the nomenclature of Chinese old works.

**ZINC BLOOM.**—爐甘石 (*Lú-kan-shih*).—This "sweet slag," described by Tatarinov as a carbonate of magnesia, is a calamine of considerable purity, resembling the botryogen, or zinc-bloom of mineralogists. It is brought from Ta-yuen fu and Tseh-chau fu in Shansi, and from places in Sech'uen and Yunnan. It is believed to occur in connexion with gold and silver. It is in the form of light, white, clinking pieces, sometimes cerebriform on the surface, and varying very much in size, as from one quarter to two or three inches in the largest diameter. The fractured surface is of a dead-white colour, and often veined with a ferruginous, red matrix, from which it is easily separated by solution in dilute sulphuric acid, with evolution of gas. The specific gravity is about 2.67, according to Hanbury. It contains a small portion of iron, and also of lead. Small chalky, very white pieces come from Shansi, and sell at a higher price. Brass, and an alloy called 鍮石 (*Yú-shih*), are said to be producible from it, when mixed with copper. Hanbury gives 浮甘石 (*Fau-kan-shih*), as the name of his specimens. Persia is mentioned in connexion with this substance. It is ordered to be levigated and dried, after the usual preliminary mixture with the urine of a boy (a common medicinal dose), and given as an astringent, escharotic, desiccant and discutient remedy. Mixed with cuttle fish bone and borax it is recommended as a powder for the treatment of diseases of the eye. Mixed with nitre, sulphate of soda, bloodstone, catechu, camphor, alum and other substances it is used to treat sore eyes and ears, and chancres, or running sores.

**ZIZYPHUS.**—See *Jujube*, *Buckthorn* and *Rhamnus soporiferus*.

*FINIS.*

# ADENDA ET CORRIGENDA.

Page 12.—After the article on "Amber-powder," insert "Ambergris."—龍涎. See *Dragon's Spittle* and *Whale*.

Page 17.—After the article on "Andrographis Paniculata," insert "Andromeda polifolia." 羊躑躅. See *Azalea*.

Page 21.—Line 6 from top, omit "or Areca oleracea."

Page 32.—Line 6 from top, for "hygrometric," read "hygroscopic."

Page 35.—After the article on "Bear-gall," insert "Beaver."—膃肭獸. See *Castor*.

Page 45.—The article on "Birch" should be inserted after "Biota," on page 38.

Page 184.—After the article "Red Hæmatite," insert "Red Lady-bug."—紅娘子 (*Hung-liang-tsze*). This insect, found upon the Ailanthus and several other trees at Hankow, is a sort of Red Cicada, making a grinding noise. It has a red body and dark wings, and is collected in large quantities by the country-people for the druggists, who use them as blistering flies. They are much less powerful than the Mylabris Cichorii.

Page 192.—After the article on "Salvia Plebeia," add "Samshu." See *Spirit*.

There are several minor corrections, of little consequence, which the reader can excuse, in consideration of the hurried manner in which the fair copy of the manuscript, and the correction of the letter-press, have been executed by the Author, prior to his departure for England.

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